

# The Mining Journal

## RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[The MINING JOURNAL is Registered at the General Post Office as a Newspaper and for Transmission Abroad.]

No. 2355.—VOL. L.

London, Saturday, October 9, 1880.

[WITH SUPPLEMENT.] { PRICE SIXPENCE. PER ANNUM, BY POST £1 4s.

**M**R. JAMES H. CROFTS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER, No. 1, FINCH LANE, CORNHILL, LONDON, E.C. ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railways, Insurance, Assurance, Telegraph, Tramway, Shipping, Canal, Gas, Water, and Dock Shares, and all Miscellaneous Shares.

BUSINESS negotiated in Stocks and Shares not having a general market value.

Every Friday a general and reliable List issued (a copy of which will be forwarded regularly on application), containing closing prices of the week.

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25 Almada, 10s. 35 Parys Copper, £1 13s.  
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20 ditto £20 Debentures 50 Hington Down, £16 3s.  
(offer wanted). 75 Javali, 7s.  
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(offer wanted). 20 Leadhills, £3.  
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50 East Crebor, £1 2s. 6d. 20 So. Condurrow, £1 13s.  
25 East Caradon, £2 2s. 20 North D'eresby, 20s.  
30 Nouveau Monde, £1 13s. 50 So. E. Wyniad, £1 8s 9d.  
50 E. Roman Grav., 13s 9d. 50 N. Penstruthal, 12s. 6d.  
20 East Van, £2.  
45 Flagstaff, £1 13s. 6d. 20 Pandora, 18s. 9d.  
20 Frontino, £3 17s. 6d. 20 Tankerville, £2 17s 6d.  
50 Glenrock, £1 10s. 50 Port Phillip, 10s. 6d.  
50 Prince of Wales, £1 6s. 25 West Phoenix, £2.  
50 Pen-y-Orsedd, 20 Tankerville, £2 17s 6d.  
50 Prince of Wales, £1 6s. 50 Wheal Crebor, £4.  
\*\* SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

**R**AILWAYS—SPECIAL BUSINESS.

FOREIGN BONDS—SPECIAL BUSINESS.

AMERICAN STOCKS AND SHARES—SPECIAL BUSINESS. Fortnightly accounts opened on receipt of the usual cover in these and all Stock Exchange Securities.

**J**AMES H. CROFTS, 1, FINCH LANE, LONDON. ESTABLISHED 1842.

**M**R. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER, 44, THREADNEEDLE STREET, LONDON, E.C. ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.

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100 Aberllyn. 40 East Caradon, £2.  
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25 Birdseye, £2.  
15 Blue Hills.  
150 Chontales, 6s.  
70 Carnarvon, 16s.  
50 Colorado, £2 2s. 9d.  
3 Carn Brea, £24.  
25 Cambrian, 19s.  
100 Consolidated, 9s. 6d.  
5 Cap Copper, £4 13s.  
2 Dolcoath, £55 1/2.  
70 Don Pedro, 14s.  
50 Derwent, £2 2s.  
35 Deva Moyer, £2 13 9d.  
60 Emma, £2 2s. 9d.  
50 East Pool, £38 1/2.  
150 English-Austra. Gold, 18s. 6d.  
25 Eberhardt, £2 2s.  
100 Parys Copper, 20s.  
75 Pen-y-Orsedd.

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150 Brazilian. 60 Emma. 10 Mona.  
100 Bedford United. 20 Frongoch. 40 Marke Valley.  
50 Bodridis. 85 Flagstaff. 50 New Wye Valley.  
150 Canada Gold. 20 Fortescue. 100 New Kitty.  
25 Caron. 50 Glenroy. 50 Prince of Wales.  
75 Chontales. 40 Gavton. 100 Pioneer.  
70 Cambrian. 50 Glenstock. 20 Pioner.  
70 Deva Moyer. 25 Herodfoot. 100 South Penstruthal.  
10 Don Pedro. 50 Hington Down. 70 South Devon.  
40 Derwent. 100 Javali. 100 Trevinc Consol.  
100 Exchequer. 100 I.X.L. 55 West Kitty.  
100 East Ciebor. 60 Kangan. 100 Wheal Jewell.  
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See Mr. REYNOLDS's remarks on page 1145.

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70 Brazilian Gold. 20 Frongoch, £1 12s. 6d. 20 Ruby Silver, £6 17s 6d.  
25 Bwlich United. 20 Frontino, £1 16s. 3d. 10 Roman Gravels, £9 15s.  
20 Carnarvon, 18s. 6d. 40 Glenrock Gold, £1 6s 3d. 50 So. Devon United, 40s.  
25 Colorado, £2 7s. 6d. 25 Hington Down, £1 13s. 6d. 20 S. Penstruthal, 12s.  
50 Consolidated, 9s. 50 Panuclillo, £2 17s. 6d. 50 Trevinc, 16s.  
50 Chontales, 5s. 9d. 20 Leadhills, £2 17s. 6d. 20 West. Wheal Kitty, £2 7s. 6d.  
20 Devon Gt. United. 8s. 3d. 25 Marke Valley, £2. 50 New Wheal Kitty, 30s.  
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25 Devon Great United, £1 16s. 3d. 50 Wheal Jewell, 16s. 10 Wheal Devon, £2 7s. 6d.  
25 Devon Great United, £1 16s. 3d. 50 Wheal Corp., 21s. 15 Wheal Jewell, 16s.  
10 East Lovell, 15s. 25 Pately Bridge, 10s 6d 10 West Chiverton, 15s 6d

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## THE MCKEAN ROCK DRILLS

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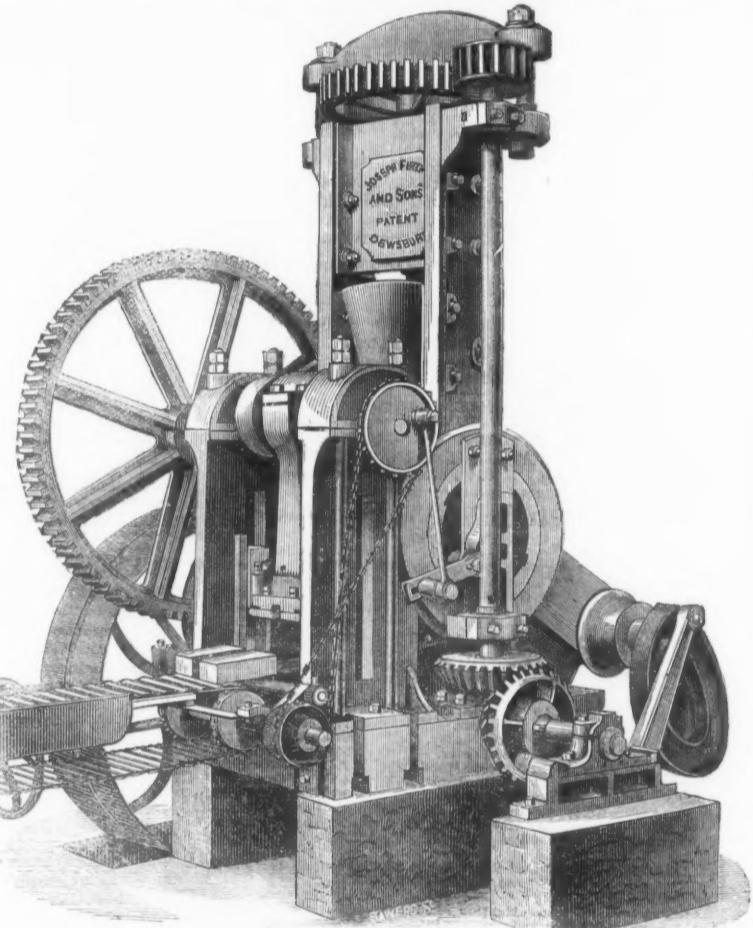
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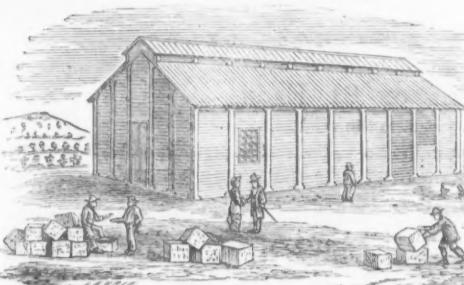
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Works: OLD GRAMMAR SCHOOL FOUNDRY, LEEDS.

## PROVINCIAL STOCK AND SHARE MARKETS.

**CORNISH MINE SHARE MARKET.**—Messrs. ABBOTT and WICKETT, stock and share brokers, Redruth (Oct. 7) write:—A fair business has been done during the past week, but prices have not been maintained, and the market closes quiet, with no particular inclination on the part of dealers to sell. Subjoined are the closing quotations:—Blue Hills, 4 to 4½; Carn Brea, 79 to 81; Cook's Kitchen, 11½ to 11½; Dolcoath, 54 to 54½; East Pool, 37½ to 37½; North Busy, 3 to 3½; Pedn-an-drea, 1½ to 2; Pendavon United, 8 to 9; Penhalls, 1½ to 2; Santa Gertrude, 175 to 180; South Condurrow, 10½ to 11; South Crofty, 13 to 14; South Frances, 12 to 12½; Tincroft, 16 to 16½; West Polgoth, 40s. to 45s.; West Peover, 15 to 15½; West Frances, 9½ to 10; West Tolgus, 50 to 52; West Seton, 17 to 18; Wheal Agar, 5½ to 6; Wheal Bassett, 3½ to 4; Wheal Grenville, 9½ to 10; Wheal Kitty, 4½ to 5; Wheal Peover, 28½ to 29; Wheal Prussia, 7½ to 10; Wheal Sisters, 2 to 2½; Wheal Uny, 2½ to 3.

—Mr. S. J. DAVEY, mine shareholder, Redruth (Oct. 7), writes:—Our market has been fairly active during the week, but prices of our higher-priced shares have slightly declined. Pedn-an-drea and West Peover shares received more attention than before. The former advanced to 2, 2½, from 1½, but afterwards lost a part of the rise, and close at 1½ to 1½. West Peover shares close 2½ higher than last week's quotation. The tin standards have risen 5s. The following are to-day's prices:—Blue Hills, 3½ to 4½; Carn Brea, 80 to 82½; Cook's Kitchen, 11½ to 11½; Dolcoath, 53½ to 54½; East Pool, 37½ to 37½; Melanear, 4½ to 5; New Cook's Kitchen, 7½ to 7½; North Busy, 2½ to 3½; Pendavon United, 7 to 8; Penhalls, 1½ to 2½; Pedn-an-drea, 1½ to 2½; South Condurrow, 10½ to 11½; South Crofty, 13½ to 14; South Frances, 12 to 12½; Tincroft, 16 to 16½; West Bassett, 15½ to 16½; West Frances, 9½ to 10; West Tolgus, 50 to 52; West Seton, 16 to 18; Wheal Agar, 5½ to 6; Wheal Bassett, 3½ to 4½; Wheal Comford, 2 to 2½; Wheal Grenville, 9½ to 10½; Wheal Jane, 2½ to 3½; Wheal Peover, 28 to 29; Wheal Kitty, 4½ to 5; Wheal Prussia, 7½ to 10; Wheal Sisters, 2 to 2½; Wheal Uny, 2½ to 3.

—Mr. J. H. REYNOLDS, stock and share broker, Redruth (Oct. 7), writes:—During the week the standards have been advanced 5s. per hundredweight, with good business doing in all the leading shares, but to-day prices have somewhat given way, on the announcement that the smelters had reduced the standards 2s. per hundredweight, consequent on tin being quoted weaker. Subjoined are the closing prices:—Blue Hills, 4 to 4½; Carn Brea, 80 to 82; Cook's Kitchen, 11½ to 11½; Dolcoath, 53½ to 54½; East Pool, 37 to 37½; Melanear, 4½ to 5; New Cook's Kitchen, 7½ to 7½; North Busy, 2½ to 3½; Pendavon United, 7 to 8; Penhalls, 1½ to 2½; Pedn-an-drea, 1½ to 2½; South Condurrow, 11 to 11½; South Crofty, 13½ to 14; South Frances, 12 to 12½; Tincroft, 16 to 16½; West Bassett, 15½ to 16½; West Frances, 9½ to 10; West Peover, 15 to 15½; West Seton, 16 to 18; Wheal Agar, 5½ to 6; Wheal Bassett, 3½ to 4½; Wheal Comford, 2 to 2½; Wheal Grenville, 9½ to 10½; Wheal Jane, 2½ to 3½; Wheal Peover, 28 to 29; Wheal Kitty, 4½ to 5; Wheal Prussia, 7½ to 10; Wheal Sisters, 2 to 2½; Wheal Uny, 2½ to 3.

—Mr. JOHN CARTER, mine shareholder, Camborne (Oct. 7) writes:—The market for mine shares has not been so active this week, but a fair amount of business has been transacted at slightly lower rates. On Oct. 2 the tin standards were advanced 2s. per hundredweight, and are now 52s. for common and 53s. for refined. Closing quotations annexed:—Blue Hills, 3½ to 4½; Carn Brea, 81 to 83; Cook's Kitchen, 11½ to 11½; Dolcoath, 53½ to 54½; East Caradon, 1½ to 2; East Pool, 37½ to 37½; Melanear, 4½ to 5; New Cook's Kitchen, 7½ to 7½; North Busy, 2½ to 3½; Pendavon United, 7 to 8; Penhalls, 1½ to 2½; South Condurrow, 10½ to 11½; South Crofty, 13½ to 14½; South Frances, 12 to 12½; Tincroft, 16 to 16½; West Bassett, 15½ to 16½; West Frances, 10 to 11; West Peover, 15 to 15½; West Polgoth, 2½ to 2½; West Tolgus, 50 to 52; West Seton, 17 to 18; Wheal Agar, 5½ to 6; Wheal Bassett, 3½ to 4½; Wheal Comford, 2 to 2½; Wheal Grenville, 9½ to 10½; Wheal Jane, 2½ to 3½; Wheal Peover, 28 to 29; Wheal Kitty, 4½ to 5; Wheal Prussia, 7½ to 10; Wheal Sisters, 2 to 2½; Wheal Uny, 2½ to 3.

—Mr. M. W. BAWDEN, Liskeard (Oct. 7), writes:—The mining market continued firm up to yesterday, but owing to a slight reaction in tin prices are easier and more shares offering. Copper mines dull and neglected. Subjoined are the closing quotations:—Bedford United, 3½ to 4½; Carn Brea, 79 to 80; Gunnislake (Clitters), 4 to 4½; Cook's Kitchen, 11½ to 11½; Dolcoath, 53 to 54; Devon Consols, 11 to 11½; East Caradon, 1½ to 2; East Creb, 1 to 1½; East Pool, 37 to 37½; Gavton United, 1 to 1½; Glazow Caradon, 1½ to 1½; Herodsfoot, 3½ to 4; Hington Down, 1½ to 1½; Marke Valley, 1½ to 2; New West Caradon, 1½ to 2½; North Herodsfoot, 3½ to 4½; Old Gunnislake, 3½ to 4½; Phoenix United, 3½ to 4½; Prince of Wales, 1 to 1½; South Caradon, 5½ to 55; South Creb, 3½ to 4½; West Bassett, 15 to 15½; West Caradon, 2 to 2½; West Frances, 10 to 10½; West Mary Ann, 1 to 1½; West Phenix, 2½ to 3½; West Creb, 3½ to 4½; West Tolgus, 50 to 51; Wheal Agar, 6½ to 6½; Wheal Creb, 4 to 4½; Wheal Fortune, 1½ to 2; Wheal Peover, 27 to 28; Wheal Uny, 2½ to 3.

—**MANCHESTER.**—Messrs. JOSEPH R. and W. P. BAINES, sharebrokers, Queen's Chambers, Market-street (Oct. 7) write:—Considering the unsettled state of affairs in the East the business reported for the past week is of fair amount, and prices generally without much sign of weakness, nevertheless a very uncertain feeling is dominant, and influences which under other circumstances would have great regard to the possibilities contingent on the action of Turkey, and the consequent action of the Powers. That a settlement will be arrived at without positive entanglement is only hoped for but expected, yet until such an amicable solution of the difficulty is secured the chances of unforeseen events, causing disagreements amongst the Powers, are sufficient to keep the markets very sensitive, and in many cases occasion sharp adverse movements. Were it not for these disturbing elements it seems very reasonable to suppose that figures would stand fair for many of the leading securities of the country, for the late propitious season cannot fail to exert a great influence on the winter trade. The general tendency as regards quotations all round is shown to be towards ease of prices;

only a few, however, except in rails, are of great moment, whilst there is a fair majority of cases of advance.

INSURANCE shares have not attracted much attention generally. Lancashire Insurance have been dealt in a few times at top figure, and Thames and Mersey Marine still continue to advance, though with only a moderate number of dealings reported.

**COAL, IRON, &c., AND MINING.**—No movement of importance has taken place in these securities, the general tendency being rather towards lower figures during the past few days. Business done of a very desultory character, showing no special feature. The changes of quotation show—Bilbao Iron Ore and Ebbw Vale Steel, &c., ½ each higher, while the following are lower—Consett Iron, 8½; John Brown, 1; Staveley Coal and Iron, 1; Bolekow, Vaughan fully paid and 12½ paid, ½ each; Sheepbridge Coal, &c., ½; Darlington Iron, ½; Tharsis Sulphur and Copper, ½. The difference in the quotation in Consett Iron arises from the shares being now quoted ex all—that is, ex the dividend and new issue of shares. The slightly harder feeling noticeable in iron, &c., securities a few days ago appears to have been arrested, and the market has again become dull and inactive.

TELEGRAPH.—With the exception of Anglo-Americans (ordinary and deferred) each of which have been done once, the market has been neglected as regards transactions. Prices, however, have moved a little, and where changed all show advance, though slight. Anglo-Americans are ½, Globe, Telegraph, and Trust, ½, and West India and Panama ½ higher.

COOTON SPINNING AND MANUFACTURING SHARES.—The securities continue firm as regards prices, but business in progress is very meagre for the same reason as we have noticed for some time, that buyers do not yet see prospects sufficiently promising to warrant them following to any extent the demand of sellers. —

CANALS have not changed hands, excepting a solitary sale of Bridgewater, pref. Quotations unaltered. —

MISCELLANEOUS show a fair proportion of the dealings, and prices realised are about those lately ruling. Rylands mark an advance of ½, Manchester Corporation Stock ½, but Manchester Carriage, A, are ½, and ditto, C, ½ lower. A fairly good tone rules in the market generally.

RAILWAYS.—A further considerable reduction has been made in the price of railways. No amount of strength has shown itself, and the lowest values are marked generally. The most noticeable feature is the decline in Brighton, A, after being up at 15½ on Monday, consequent on the good traffic they have, drooped daily, and without any recovery quote 6 easier. The Deferred stock as a rule have been subjected to severe depreciations, and the heavy lines are influenced by the unsatisfactory state of market dealings. Traffic this week were very good, with the exception of London and North Western, and as this only shewed an increase of 2591t., it gave "bears" an opportunity of further depressing their value. Canadians have gone in sympathy with English lines, but on the whole Grand Trunks do not show much variation, while Great Western exhibits a fall of 10s. per share. Americans may also be classed as the before-named, ½, Manchester Corporation Stock ½, but Manchester Carriage, A, are ½, and ditto, C, ½ lower. A fairly good tone rules in the market generally.

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HULL.—Mr. W. FOWLER SUTTON, stock and share broker, St. Mary's Chambers (Oct. 7), writes:—Flat markets have been the rule on the Stock Exchange during the week, and while all railway stocks have suffered in value Brighton, A, have been especially depreciated, and show a loss of 3d. per cent., though at one time to-day it was fully 1 per cent. more. The knowing ones of the market appear to consider the fall as preliminary to another such rise as was witnessed in the spring, and looking at the dividend prospects of the lines this view is most probably correct. Presuming no excess of dividend is earned this half-year over the corresponding one of last, which is the most unfavourable view that can be taken, looking at the accrued increase in traffic receipts already, the A or deferred stock will receive 7t. 15s. per cent. in January. The stock must, therefore, be cheap to a persistent holder at anything under 17s. Traffic receipts continue satisfactory, and only a settled political horizon would seem to be required to bring markets into a thoroughly healthy state. Canadian stocks drop despite good traffic, but as the speculative account in them must by this time be reduced to a minimum we shall probably see a rally shortly. The American markets continue uncertain, owing mainly to the presidential election. Local stocks very quiet at following quotations:—Hull Banks, 11½%; London and Yorkshire Banks, 24; Hull Docks, 97; ditto 4 per cent. debentures, 10½%; Earle's Shipbuilding, 15½; Hull Trams, 9½%.

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# The Eureka (Nevada) Silver Mining Company, Limited.

ON THE RICHMOND AND EUREKA MINERAL BELT.

CAPITAL £100,000, IN SHARES OF £1 EACH,

Of which 33,000 are reserved as part payment to the vendors.

PAYMENT—5s. per share on application, 5s. per share on allotment, 5s. per share 1st November, and 5s. per share on 1st December, 1880.

CALLS MAY BE ANTICIPATED UNDER DISCOUNT OF FIVE PER CENT. PER ANNUM.

Mr. R. Rickard, the eminent mining engineer, of Eureka (superintendent of the Richmond Consolidated Mining Company, Limited), than whom a higher or more reliable authority could not be quoted, and through whose hands hundreds of tons of ore from the Eagle Mines have passed, says, in his report on these mines:—“July 20, 1880. I have no hesitation in recommending the Bald Eagle series of claims as one of the best mining prospects in the district. I have always been favourably impressed with the nature of the ground, and have no doubt that it will become a valuable property. The mine is on the same mineral belt as the Eureka Consolidated and Richmond Consolidated, and other productive mines, and the character of the ore is identical with that found in the Richmond.”

In reference to the Williamsburg Mines Mr. Rickard has endorsed Mr. Prideaux's report, annexed to the prospectus, from which it appears that 7000 tons of rich ore have been extracted. On the 20th July last a telegram was received from the mine advising that a 12-foot ledge in the bottom had been struck.

Last year's net profit of the Richmond Consolidated was over £134,000. The Eureka Consolidated have paid in the aggregate in dividends over £4,000,000, and the Bald Eagle and Williamsburg series of mines are in the same mineral belt as these successful mines, and there is every prospect of this company being equally successful.

## DIRECTORS.

W. A. MALCOLM, Esq., Chairman, | Ruby and Dunderberg Consolidated Mining Company (Limited).  
GEORGE HEIRON, Esq., Director, |  
JAMES MACFARLANE, Esq., Director Wheal Crebor Mining Company.  
Major FORTESCUE, J.P., Director West Frontino and Bolivia Gold Company (Limited).  
H. S. WILDE, Esq., Chairman London and District Omnibus Company (Limited).

(With power to add to the number).

BANKERS—THE IMPERIAL BANK (Limited), Lothbury, London, E.C.

SOLICITOR—JOHN KNIGHT, Esq., 53, Moorgate-street, London, E.C.

BROKER—E. G. PRESCOTT, Esq., 11, Warnford-court, London, E.C.

TEMPORARY OFFICES, 38 and 39, PALMERSTON BUILDINGS, OLD BROAD STREET, E.C.

SECRETARY (pro tem.)—JOHN STEVENSON, Esq.

## PROSPECTUS.

This company is formed to acquire, work, and develop certain well-known silver and gold mines in the celebrated Eureka (Nevada) District, namely the Bald Eagle series of mines near Ruby Hill, Eureka, Nevada, U.S.A., consisting of

The Bald Eagle Mine,  
The White Eagle Mine,  
The Eagle's Nest Mine;

and the Williamsburg series of mines also near Ruby Hill, consisting of

The Williamsburg Mine,  
The Williamsburg 1. Mine,  
The Williamsburg 2. Mine.

The Eagle Mines are situate in well-known and proved mineral ground, being immediately to the north and west of the celebrated Dunderberg Mine, and in close proximity to, and on the same mineral belt as the Richmond Consolidated, Eureka, and other productive mines, while the Williamsburg Mines are most favourably situated adjoining the Bullwhacker (Ruby Co's) Mine, and east of the Eureka Consolidated and Richmond Mines.

Notwithstanding the primitive way in which only a small portion of the Eagle property has been worked, considerable quantities of high grade ore have been extracted, of which over 300 tons were sold to the Richmond Consolidated Mining Company, the yield, in some instances, giving over \$200 in gold and silver alone to the ton, as may be seen by the table taken from the books of the Richmond Consolidated Mining Company, embodied in the report, annexed to the prospectus, of its superintendent, Mr. Rickard. The average value of ore smelted is \$154, in silver and gold, per ton.

The Williamsburg series of mines have, up to this date, yielded 7000 tons of ore, amounting in value to £100,000; the ore paid in silver from \$30 to \$250 per ton, with 50 per cent. of lead. A most important letter has been received from these mines (on Aug. 3 last) confirming a telegram that a 12 ft. ledge in the bottom had been struck. The importance of this discovery cannot be over-estimated.

Mr. Prideaux's report shows that the Williamsburg series of mines have in them more than ordinary chances, being far above the average of such investments, and they are now being worked at a profit. The shareholders of this company will on acquiring possession become proprietors of a paying concern.

The official returns for the State tax for the quarter ending June 30 last gave the out-turn of the Williamsburg as 312 tons, notwithstanding that a large amount of deadwork was being executed, as per report. This work is now almost completed, and, with the hoisting machinery proposed, the output of these mines will be largely augmented.

The directors desire to draw attention to the following points:—

1st.—The company is entering into possession of properties earning immediate profits, and of others in a forward state of development.

2nd.—The ores extracted have proved of high grade, and ample in quantity.

Turks were offered, the Circular from the Porte proposing to seek an “arrangement” for doing something for the bondholders being regarded as valueless. On Saturday and Monday the “little Turks” were largely bought by Greeks, who had early information as to the contents of the Circular, but they did not find the outside public to-day eager to relieve them of their bargains at a profit. All their buying only elevated the price  $\frac{1}{2}$ , and to-day they had to submit to a reduction of  $\frac{1}{2}$ . Erics closed at \$40 $\frac{1}{2}$ , Readings at \$15 $\frac{1}{2}$ , and Pennsylvanias at \$60 $\frac{1}{2}$ , being lower in each case.

WEDNESDAY.—Brighton opened 1 cent. down, and ultimately finished no better than 155, being a fall of 4 $\frac{1}{2}$  from the best of Monday. This unexpected drop created a great deal of consternation, among brokers especially, who saw “covers” vanish in a few hours. Dover, A, receded 1 $\frac{1}{2}$ , and Great Western 1. North-Eastern, 165 $\frac{1}{2}$ . Birmingham, 153 $\frac{1}{2}$  to 153 $\frac{1}{2}$ . Dover, A, 130 to 130 $\frac{1}{2}$ . Great Western, 124 $\frac{1}{2}$  to 125 $\frac{1}{2}$ . Spanish receded to 21 $\frac{1}{2}$ , and Mexican to 13. East Car. Ion, 13 $\frac{1}{2}$  to 2. Glenrock, 1 $\frac{1}{2}$  to 1 $\frac{1}{2}$ . Nouveau Monde, 1 to 1 $\frac{1}{2}$ . Devala Moyer, 2 $\frac{1}{2}$  to 2 $\frac{1}{2}$ .

THURSDAY.—There is no dividend for the West India and Panama shareholders. Of the balance in hand owing to the interrupted condition of the company's system it is thought desirable to place 5 per cent. to reserve account, and to carry forward 5841. The usual interim 5 per cent. dividend has been declared by Reuter's Telegraph Company. Home railways had a further tumble. Brighton, A, at one time touched 152 $\frac{1}{2}$ , but recovered from this towards the close. Most of the others fell from 1 $\frac{1}{2}$  to 1. Foreign Bonds gave way too, the only instance of an improvement being in Mexican, which advanced to 14 just before the close.

FRIDAY (Opening).—Home railways are somewhat better. Strenuous efforts are being made to prop up Brighton, A; and the price is now 154 $\frac{1}{2}$  to 153—a recovery of 2 $\frac{1}{2}$  from the lowest of yesterday. Midland, Great Western, and North-Western are all 1 $\frac{1}{2}$  to 2 better. Sheffield, A, 59 $\frac{1}{2}$  to 60. Dover, A, 130 $\frac{1}{2}$  to 130 $\frac{1}{2}$ . Midland, 133 to 133 $\frac{1}{2}$ . Berwick, 165 to 165 $\frac{1}{2}$ . Foreign bonds are irregular. Mexican have relapsed  $\frac{1}{2}$  (to 13 $\frac{1}{2}$ ), while little Turks are in some request at 10. Unified are the same as last night, and somewhat dull. Atlantic First Mortgage are offered at 67. Mining shares are easier for buyers, many of whom are quietly absorbing the bargains that are offered, to resell later on at a good profit to those who for some reason or other are pressing sales. East Crebor, 1 to 1 $\frac{1}{2}$ . Prince of Wales, 1 $\frac{1}{2}$  to 1 $\frac{1}{2}$ . Parys Corporation, 7 $\frac{1}{2}$  to 1 $\frac{1}{2}$ . Wheat Crebor, 3 $\frac{1}{2}$  to 4. Eberhardt, 2 $\frac{1}{2}$  to 2 $\frac{1}{2}$ . Richmond, 15 $\frac{1}{2}$  to 15 $\frac{1}{2}$ . New Quebrada, 4 $\frac{1}{2}$  to 4. Two o'clock.—Brighton are now but 154 $\frac{1}{2}$  to 154 $\frac{1}{2}$ , having given way  $\frac{1}{2}$ . Sheffield (A) are, however,  $\frac{1}{2}$  better—at 60. Turkish Fives, 10 $\frac{1}{2}$ . Mexican, 13 $\frac{1}{2}$  to 13 $\frac{1}{2}$ . Caledonian, 110 $\frac{1}{2}$  to 111. North British (new), 3 $\frac{1}{2}$  to 3 $\frac{1}{2}$  premium; the others are 83 $\frac{1}{2}$  to 83 $\frac{1}{2}$ , being an advance of  $\frac{1}{2}$ . Four o'clock.—Brighton have been as high as at the opening, but have now relapsed again; and the improvement in Dover, A, is lost. Trunk Second Preference, 81 $\frac{1}{2}$  to 82; Third, 40 $\frac{1}{2}$  to 41. Chillington Iron, 4 $\frac{1}{2}$ . Nant-y-Glo and Blaena, 30 to 32 $\frac{1}{2}$ . Rhymney Iron (new), 7 to 7 $\frac{1}{2}$ . Newport Abercarn, 6 to 6 $\frac{1}{2}$ . Dan Pedro, 5 $\frac{1}{2}$  to 5 $\frac{1}{2}$ . Glenrock, 1 $\frac{1}{2}$  to 1 $\frac{1}{2}$ . Almaden and Trito, 7 to 7 $\frac{1}{2}$ . Canada Copper, 1 $\frac{1}{2}$  to 1 $\frac{1}{2}$ .

FREDERICK R. KIRK.

SENTEIN.—During the past fortnight this company has sold 100 tons of silver-lead ore for 1200 $\frac{1}{2}$ , and 300 tons of blonde for 825 $\frac{1}{2}$ . Messrs. Weston and Sons being the purchasers of the former, and Messrs. Vivian and Dillwyn of the latter.

are amongst the cheapest in the market at the present time. I should not be surprised in the least to see them at quite as good a price as Devon Great Consols within a comparatively recent period of time. We have every reason to be satisfied with the position of Gawton, and I shall be very happy to give the market price for all the shares in the company. I have to thank you for your presence here to-day. We have really no resolution to bring before you. We as directors tender our resignation, and place ourselves in the hands of the shareholders.

Mr. McCALLAN proposed in cordial terms the re-election of the four gentlemen who he said had already served the shareholders so well—Mr. George Batters (the esteemed Chairman), Mr. Rowlands, Mr. Hunter, and Mr. Roberts. What was their remuneration? He did not like the idea of gentlemen serving him as a shareholder for nothing.

The CHAIRMAN replied that the directors received 100*l.* a year divided between four of them—25*l.* each. (Laughter.)—Mr. McCALLAN said the amount was absurdly low, and that the directors had shown an amount of self-abnegation not often found in public bodies.—The CHAIRMAN added that one gentleman came from Leamington to attend the board meetings at a cost of 22*s.* 6*d.*, and his fee was one guinea. (Laughter.)—The shareholders agreed that the time would come when they would have to revise this arrangement in favour of the board.

The motion was carried unanimously, and the proceedings were then brought to a close.

## TANKERVILLE MINING COMPANY.

An extraordinary general meeting of the shareholders was held at the offices of the company, Austin Friars, yesterday, for the purpose of confirming the following resolutions, passed at the extraordinary general meeting of shareholders in the company, held on Sept. 16:—

1. That it has been proved to the satisfaction of the meeting that the company cannot by reason of its liabilities continue its business, and that it is advisable to wind up the same. 2. That the Tankerville Mining Company, Limited, be wound up voluntarily, under the provisions of the Companies' Acts 1862, 1867 and 1877. 3. That Messrs. John Henry Murchison, of Austin Friars, and Henry Jervis Alfred, of Moorgate Street, be, and they are hereby appointed, the liquidators of this company, and that their remuneration be the sum of 105*l.* 4. That the liquidators be authorised to transfer the property and business of the Tankerville Mining Company, Limited, to another company formed for the purpose of purchasing and working the plant and machinery of the Tankerville, Bog, and Pennerley mines, with a capital of not less than 110,000*l.*, consisting of 110,000 shares of 1*l.* each, of which 36,000 shares shall be offered for subscription in the first instance to the shareholders in the Tankerville Mining Company, Limited. 36,000 shares shall be allotted fully paid up a bonus, share for share, to the persons who subscribe for, and pay the sum of 1*l.* per share on the first named 36,000 shares, and in consideration of their so doing, 36,000 shall be allotted fully paid up among the shareholders of this company in the proportion of three shares for one, according to their holding in the Tankerville Mining Company, Limited, as part of the consideration for the transfer of the property and business of the Tankerville Mining Company, Limited, being made to the said new company, and on the said new company taking upon itself the payment of the debts and liabilities of the Tankerville Mining Company, Limited, together with the expense of winding-up the same. 1000 shares shall be allotted fully paid up, and applied in part payment of the purchase money of plant and machinery in the Bog and Pennerley mines. 1000 shares shall be allotted fully paid up and applied towards the expenses of, and incidental to the formation of, the said new company, and that the liquidators be authorized to make such sale and transfer, and enter into such arrangements for carrying out the above, or such modification thereof as may appear necessary. And that the liquidators have full power to continue the works at the Mine, pending the carrying out and completing the above arrangements, and pay the costs occasioned thereby out of the funds of the Company, the amount so paid to be repaid to the liquidators by the new company.

The chair was occupied by Mr. PETER WATSON.

The notice calling the meeting was read by Mr. J. H. Murchison, the London manager and secretary.

The CHAIRMAN said: Gentlemen, this is a mere formal meeting, to confirm resolutions which were passed at an extraordinary general meeting held on the 16th of September last. We did not expect a large number of shareholders to be present. I may state we have got a larger number of proxies than ever before from the shareholders of this company, numbering about 140 shareholders, and that, I think, will show to you, gentlemen, as well as to the shareholders who are absent, the feeling there is with regard to this idea of the amalgamation of these three properties. From what I have heard since the last meeting, I am satisfied that several of the shareholders who did not intend to take up their shares have not only consented to do so, but if there are any shares which are over, will increase that interest. I may state, also, for the information of the shareholders present, as well as absent, that any shares which are not taken up by a certain date in the new undertaking, of course, will be allotted to other applicants; but I imagine shareholders, consulting their own interests, will not lose the opportunity of applying not only for their full interest, but any additional shares which may be over, because, as is well known, we are trustees and executors, although not to a large extent, to those in this undertaking who are prohibited from taking any interest in the undertaking. However, I hope that every shareholder will take his proportion of shares, and if he can obtain any more it is my advice that he should do so. I can only say that any shares which may be over, personally I shall be very pleased indeed to take, to the extent of a very considerable interest, whatever others may do. (Hear, hear.) There is a very strong feeling in the neighbourhood, and also amongst some of the local shareholders, that this is the best thing which could possibly have been done with the Tankerville, Bog, and Pennerley mines. By a vigorous prosecution we hope to be able to resuscitate this mine, and we trust the day is not far distant when we shall get them fully to work, and that the property will become as marketable as ever it was. (Cheers.) It should be clearly understood, as I pointed out at the last meeting, that these three united properties were selling at one time at between 400,000*l.* and 500,000*l.* There is no question with respect to the value of the various lodes; there is no other united property in the kingdom where the lodes are known to be so valuable for lead and blonde; and I hope to live to see the day when this mine will take the foremost and permanent position of any lead and blonde mine in this country. (Cheers.) There is no doubt that by a vigorous prosecution and development of the well-known lodes, they will become a very valuable run of mines. (Cheers.) I have no more to say at the present, but I shall have something to say to the shareholders on a future occasion.

The several resolutions given above were then formally moved and seconded *seriatim*, and carried unanimously.

Mr. GARNETT, whilst expressing his general approval of the amalgamation, asked for some little further information as to how it was supposed that the amalgamated mines could be worked more economically than when worked separately. It seemed to him that the principal saving would be in the remuneration of Directors, and of the superintendent manager.

The CHAIRMAN pointed out that the three mines might be regarded in the light of three shops, situated in different but adjacent streets, but worked under one management, and said it must be evident that three separate shops so conducted could be more economically managed than if conducted by three separate managements. Then, again, an important advantage and economy might be obtained in regard to labour, by the three mines being placed under the superintendence of the manager of Roman Gravels. Again, this amalgamation would enable the mines to be more vigorously prosecuted than heretofore, as the development of the mine itself had been comparatively little. In the Bog it was known there was a valuable lode at the bottom of the lead-blende, which it would take years to work. At the Pennerley not a foot was sunk below the bottom level, but 60,000*l.* had been taken out. Beyond that, as the lodes ran from one mine to the other, a great economy would be effected with regard to pumping and unwatering the mine. There would also be a saving in dressing operations, owing to an improved mode of dressing. He believed that before twelve months were over they would be raising as large a quantity in these three united mines as the Van mine was doing at present, and they were aware that the Van was now selling for something like 300,000*l.* A large number of Bog and Pennerley shareholders had asked that, in case there were any shares over, they should be allowed to come in. One of the largest shareholders in Bog and Pennerley had asked him to secure some thousands of shares if they could be obtained. He could only say that if there were any shares not taken by the Tankerville Great Consols shareholders (for that was to be the name of the united properties), and if shareholders of Bog and Pennerley would make application to the incoming directors, he would do his best to secure shares for them.

The meeting then broke up.

[For remainder of Meetings see this day's Supplement.]

## FOREIGN MINES.

DON PEDRO.—Mine captain's monthly report for August: New Machinery: The excavation for the loading of hydraulic machinery is completed. We are obliged to go much deeper than required to be able to get a good bottom for a base to build on to the point required for loading. The wall will be very strongly built, but “dry random wall work”—i.e., built with large boulders, but without mortar. A large quantity of stone has been raised for this work, which will, we hope, keep the masons employed until all stone required may be raised, so that they be not idle for want of material. All efforts will be made towards the erection of the new machinery until the arrival of the engineer or competent person to put it up. A man specially selected by Mr. Darlington should by this time have arrived at the mines. Not having had any connection with machinery of this description, I do not feel justified in taking the responsibility on myself of this erection, although for the moment all works appertaining to same are being carried out to the best of our ability. The repairs of the 60-ft. wheel and machinery are completed, and wheel put to work on the 25th at 5 p.m., since when it has been put idle for repairs in mine to launders, rolls, &c. So far nothing can be more satisfactory than the present condition of both machinery and wheel throughout. Water put in to bottom of downrings on Vivian's shaft, so that the jack head lift is up. Regos: All clean, and a fair supply of water for our works. So far the dry season has not materially affected the springs.

Extract from Mr. Heilbush's letter of Aug. 30: I did not write as usual on the 24th inst., as I wished to give you full particulars, and I have now the pleasure to say that the new machinery, at Elbe, has all been sent forward from Barcelos, and that four carts have already arrived here with part of same; the remainder is expected up in a few days. You will observe that no time has been lost in getting it up country, and I may as well add that the price for carriage is comparatively low to what it formerly was, account of which I will send you after the delivery of all.—P.S. Whilst writing this some more carts with the machinery have arrived.

SENTEIN.—Oct. 2: The manager reports as follows:—During the past fortnight we have broken at the mines fully 600 tons of ore of galena, zinc, carbonate of lead, and a little calamine. The quantity brought down is less than usual, owing to delays in consequence of our having to change some of the conducting lines of the wire-rope, &c.—400 tons. Some

commence dressing there. We have sent to St. Gérons about 230 tons of blends during the past two weeks. Next week we shall send away 100 tons of lead for smelting.

**TOLIMA.**—*Frias:* July returns, \$14,733; cost, \$12,474.23; profit, \$2,258.61. The superintendent explains that the diminished returns are attributable partly to a slight falling off in the yield and quality from some of our principal stations, and partially to a diminished output of ore-stuff in consequence of a short supply of water for the drawing wheel during the continued dry weather, the ore meanwhile having to be accumulated in the mine.

**RICHMOND CONSOLIDATED.**—Telegram from the mine at Eureka, Nevada: Week's run, \$65,000, from 1180 tons of ore. Refinery, \$50,000.

—*R. Rickard, Sept. 3:* There is nothing new to report from the mine for the past week, owing to it being closed down five days for a thorough overhauling of the machinery, consequently little work was done. The machinery is now in thorough repair and working well.

—*R. Rickard, Sept. 15:* During the past week operations, both in the mine and smelting works have been carried on with the usual regularity. The cross-cut from Lizette tunnel has been extended 9 ft. in hard ground. The 200 north cross-cut from west drift has been drifted 6 ft. without any change to mention. The 500, north from No. 14 chamber, has been extended 23 ft. in favourable ground. The 600 west drift has been advanced 23 ft. in favourable ground for drifting. The 600 No. 1 cross-cut, north cross-cut, has been extended 23 ft. in soft ground. The 600 No. 2 north cross-cut has been drifted 10 ft. in hard limestone. The 600, north from No. 14, has been extended 14 ft. without any change to mention. The 700, west from shaft, has been drifted 8 ft. in favourable looking limestone. The 800, north-west from winze, has been advanced 10 ft. without any change to mention. The 800 north cross-cut has been extended 27 ft. on a well-defined fissure, and in favourable ground for striking ore. The 900 north cross-cut has been extended 29 ft.; the face of the drift is in very favourable ground for striking ore. The 900 north-west drift has been advanced 29 ft. on a regular seam, with very good indications for ore. The chambers are without any change since my last. The furnaces are in good working order, and smelting large quantities of ore.

**LA PLATA.**—Telegram received, Oct. 7 states:—Ore purchased September, 2750 tons; smelted, 2150 tons; bullion shipped, 550 tons; value in New York, over \$20,000. *Oyoa Plata* produced in six days, 175 tons.

**COPAIPO.**—*T. B. Hall, Aug. 14:* *Dulcinea:* Fletcher's shaft, sinking below the 170, by three men, at \$50 per metre; lode about 2 ft. wide, yielding 2 tons of ore per fathom. Our progress here is rather slow, the ground not being hard, but very troublesome on account of the short nature of the stone; that I think it will still take nearly two months to get to the end of the drift for the 180. The 170 to drive north is set to two men, at \$25 per metre; within the last three days we have had a decided change for the better in this end. The whole face of the driftage, instead of being so poor as within the last three months, is now filled with small spots of ore, and though not sufficient to value shows very promising features for further improvement. The 170 south is set to three men, at \$30 per metre; the lode here is without any change, being very hard for driving, but in a very good course of ore, being 3 ft. wide, and yields 3½ tons of ore per fathom. The winze sinking in this level south of shaft, is set to three men, at \$35 per metre; the lode is 4 ft. wide, worth 4 tons of ore per fathom. The 180 to drive north of shaft is set to two men, at \$25 per metre; here also the lode has improved, and yields 1 ton of ore per fathom. The 180 to drive south of shaft is set to three men, at \$25 per metre. I have increased the workmen here that a communication may be made possible by the end of the month with the winze sinking from the level above; the lode is 3 ft. wide, and yields 2½ tons of ore per fathom. The winze to sink below this level is set to three men, at \$30 per metre; the lode is 4 ft. wide, and yields 3 tons of ore per fathom. The 180 to drive north of shaft is set to two men, at \$25 per metre; this rise is now up from the back of the level 19 metres. The 180 end, driving east on the north lode, by one man, at \$10 per metre. During the past month we have driven through a cross-course at this point; we have, however, again found the lode on the western side, which appears to be of a promising character. The chilton sinking below this level, by two men, at \$11 per metre; the lode here is 4 ft. wide, and produces some very good stones of ore, but as yet we have not reached the region where we expect to find the shoot of ore coming from the adjoining sett. July production is estimated at 44 tons of 14 per cent.

**Checo Copper Mine:** Stopping in back of the 30 by one man; the lode is 2 ft. wide, yielding 1½ ton of ore per fathom. Stope in back of the 50, east of rise, by two men; the lode is 1½ ft. wide, producing 1½ ton per fathom. Stope west of rise by three men; the lode is yielding 2 tons of ore per fathom. Rising above the 40, on south lode, by two men, at \$22 per metre; the lode is 4 ft. wide, yielding 1 ton of ore per fathom; this rise is now up from the back of the level 19 metres. The 40 end, driving east on the north lode, by one man, at \$10 per metre. During the past month we have driven through a cross-course at this point; we have, however, again found the lode on the western side, which appears to be of a promising character. The chilton sinking below this level, by two men, at \$11 per metre; the lode here is 4 ft. wide, and produces some very good stones of ore, but as yet we have not reached the region where we expect to find the shoot of ore coming from the adjoining sett. July production is estimated at 44 tons of 14 per cent.

**Checo Silver Mine:** The bottom end on south branch, by one man, at \$10 per metre; we have indications here that we are approaching the big lode that is traversing this sett. This lode has not been seen below the surface in this mine, and it should only give a low percentage for silver. It would pay very well owing to its great breadth. We are still extracting a small quantity of ore, but not sufficient to cover our expenditure. The Dulcinea Mine, as you will observe from the above report, is, on the whole, looking well, and from its general appearance leads me to believe it is of a permanent character. The estimated value of Dulcinea production is \$17,250; expenditure, \$9250; surplus, \$8000. Estimated value of Checo July production, \$1716; expenditure, \$1400; surplus, \$316.

**TITANGU (Gold).**—*T. S. Treloar, Pitangui, Sept. 2:* The produce for the month of August is 1667 oits, of gold, which at \$8.64, per oitava gives a result of 7034.92, 61, obtained from 18 cts. of vein-stuff and 144 tons of general mineral. At the date of his last advice the vein in the bottom was very rich, and the features of the ground led him to expect that the bunch would be of some duration, but had not sunk far when the vein became obstructed and disordered; he hopes, however, that on getting through this obstruction to find, as on previous occasions, a good deposit of gold vein below it. Mr. Treloar reports that in Holland's shaft the junction with Francisco Antonio's underlie shaft had been reached, and if not interrupted by water the vein should be met with before the end of the current month, and that up to the date of this communication no sign of any water had been discovered.

**SANTA BARBARA (Gold).**—*W. H. Richards, Sept. 1:* The skip-road is completed and in good working order. The laying of the road was commenced on Aug. 15 and finished on Aug. 30. Yesterday we commenced hauling from the bottom of the shaft 7 fms. deeper than slope No. 7, and it was effected with greater facility and regularity than we have ever yet experienced; so much so that the output yesterday was 100 wagons. We are now clearing out the sump and preparing to pump from the bottom of the shaft, and in two or three days there can be no doubt that we shall be able to resume sinking, when, as you are aware, we shall considerably increase the quantity of first-rate mineral, as the lode is from 9 to 10 ft. wide, and of good quality. While the skip-road was being laid the output of stone from the mine was, of course, proportionately less, and averaged about 70 wagons; consequently we were not able to pick so easily as I could have wished; and, as the stopping has been carried on in the southern workings, we have had some inferior stone from slopes 5 and 6. Water continues to fall in all water-courses.

**CONNOLLY MINE.**—The following letter has been addressed by the company's solicitor in Nevada to Mr. Potter, the manager at the mine:—Eureka, Nevada, Sept. 3: At your request I make a statement of the legal contest between the Ruby Dunderberg Company and yourself—the Dunderberg claim against the Connolly claim. The Dunderberg claim is the older location; was located prior to the adoption of the Mining Laws of the United States of May 10, 1872. At the date of that location our laws did not require that a mining location should be marked upon the ground so that its boundaries could be traced. The Act of May 10, 1872, makes such marking necessary. The owner of the Dunderberg after the Act of May, 1872, set up some stakes around, and applied for a Government title to that Dunderberg which is shown in green on diagram (enclosed) marked A, and paid the proper officers of the United States for those premises. Observe please this Dunderberg does not conflict with Connolly, except a little corner of no value. The Dunderberg owners had always claimed their ground, as shown in green. Mining men mostly say that there is a vein extending easterly and westerly through that (in green). Shortly after the payment for those premises (in green) there were large developments south of what was their south line as they then had it. They then claimed to have made a mistake as to the course of their vein, abandoned that which they had applied and paid for, and made a new application, which is marked in red lines, and marked Dunderberg on diagram A, thereby including a large part of Connolly. This we are contesting. The title of the action in our Court is Connolly v. Heyneymann (Reilly held title to Connolly, and Heyneymann to Dunderberg, when the action was commenced). The trial of the case takes place September 20 in our district Court. I have great confidence in sustaining the Connolly title to all the ground.—A. W. HILLHOUSE.

Oct. 2: The directors are this day in receipt of the following telegram:—“Judgment in our favour gives us—Connolly all right, and all ore east of us on the dip. Reilly will sue for large damages for ore taken by old Ruby Company.”

**NEW GOLD RUN.**—*F. M. Chadbourn:* The last clean up from washing was exceedingly poor, but the run we can make in the future will show much better results, as we are getting towards the high bank, and in good shape for washing as soon as water comes again. The dirt is soft, and will wash without any blasting; our principal expense will be water. I think I can make a run every thirty days at an expense of from \$1500 to \$1800 that will clean up on an average \$4500 in getting up to the present time we have had a good deal of dead work to do with the claim fitted up, building tressle, laying pipe, &c. The mill will be completed and running to-morrow, September 15. We shall not get to running regularly night and day for a few days, as we are so much pressed for room. We have got our dump full of gravel in starting in the drift, and must remove this out and make large dumps, but we shall soon get cleaned off enough to have working room. The drift thus far prospects well; considerable gold should be in the bed-rock. There seems to be no doubt that it will pay well for milling. The expense of erecting the mill amounts to about \$5000.

**RUBY AND DUNBERBERG CONSOLIDATED.**—Telegram from Eureka, Oct. 5: The first-class ore melted during the week was 42 tons, and realised net about \$45½ per ton. Second-class ore melted was 43 tons, and realised net about 87 per ton. The quantity of ore extracted during the week was 66 tons.

Extract of special report from the Superintendent at Eureka, dated Sept. 18: The reason of the falling off in the returns of the Dunderberg were explained in one of my former letters; it was, as then stated, only temporary. There is a marked improvement at several points. The 300 stope, or rather the exploratory rise, has entered into a large mass of low-grade ore; at present it is not good enough to pay for shipping, but we may expect to get some good ore from there shortly. The drift south from the 500 stope is in fine ore—the best we have found in the mine. The winze below the 500 has also opened a nice body of good ore, but this will not be available until the shaft is sunk and drift run out to intersect it. The prospects of the mine are as good as ever. The trouble with us has been the extraction of the ore as fast as it was discovered,

which left us with no reserves on hand, and if the ore failed at any point there was necessarily a falling off in the returns. There need be no apprehension as far as the mine is concerned.

**VIRNEBERG (Copper).**—*Capt. R. K. Roskillet, Oct. 6:* Since my report of the 21st ult. the 160 cross-cut has been extended east of shaft 2½ metres. In this drivage we have passed through a branch of about 2½ feet wide, composed principally of quartz disseminated with spots of copper ore; immediately east of this branch, &c., in the forebreast, the rock consists of a very congenial grauwacke, mixed also with quartz and copper ore; hence our indications at this point are very encouraging indeed, and, judging from the appearance of the strata now in the end as well as the branch just passed through, which in this level has the same characteristics as in the level above before meeting with the lode, we have every reason to believe that we are in close proximity to the same, which, when intersected, will undoubtedly be found productive; set to seven men, at 50 marks per metre. To stop the back of the 140 metre level, south of shaft, to four men, at 15 marks per metre; lode worth 4½ per fm. The lode in the stopes in back of ditto, north of shaft, is worth 10½ per fm.; set to six men, at 30 marks per metre. To stop the back of the 140 metre level, north of cross-cut, south of shaft, to six men, at 20 marks per fm.; the lode is a little fallen off in value, and only worth 10½ per fm. These men are also employed in driving north of slope, in which the lode is worth 8½ per fm.; this end is being extended so as to lengthen this piece of ore ground. To stop the back of ditto, north of rise, to eight men, at 16 marks per metre; the lode is worth 12½ per fm. To stop the back of same level, north of rise, and on the hanging wall of the lode, to six men, at 15 marks per metre; lode worth 8½ per fm. In the 120 stope, south of shaft, the lode is not looking quite as well as when last reported, on, worth at present only 12½ per fm.; set to eight men, at 15 marks per metre. To stop the back of ditto, on footwall of lode, to six men, at 18 marks per metre; the lode here is a little improved, and now worth 12½ per fm. Satisfactory progress is being made in the dressing department, and we are getting on well towards preparing another parcel for sampling.

**CANADIAN COPPER.**—*Capt. Bennett, Sept. 24:* St. Francis Mine: We have timbered and secured the shaft to the adit level, and the men will now be employed in securing the adit level. I find that the boiler I had intended to send to this mine to supply the steam to pump out the mine requires new tubes; this work will be done as quickly as possible.—Acton Mine: We are still breaking ore from the black shaft, and have a little improvement in the quality of the ore in the western end of Williams's pit. In boring with the Diamond drill in the bottom, No. 1 winze we obtained a core of copper ore (yellow) of 4 to 5 in. long at a depth of about 40 ft. from the bottom of the 10, and the vein is very large and subject to sudden improvements, we will test it at this point as soon as we can get a hole through to the level beneath.—Hartford Mine: We are doing somewhat better than I expected when I saw the preparatory labour required to enable us to get properly to work at the stopes, so that we shall soon have the ore broken during the month. We have changed the pump work in the 50 shaft, opening up the stopes west of the shaft for attack. The vein in the stopes maintains its general average width and quality. The quantity of ore hauled, dressed, and sent to the smelting works 40 tons: total, 155 tons.—Bolton Mine: I am glad to inform you that this mine is looking very well, and promising; by this I mean that in the 10 south of the north shaft we are driving on the footwall of the western vein; immediately on this footwall there is a portion of the vein of about 1 ft. wide that will yield ½ ton of 7 per cent., to 8 per cent. lodes averaging 1 foot at 40 ft. from the bottom of the 10, and the vein is very hard, containing copper ore disseminated throughout the mass to the extent of probably 2½ to 3 per cent. for copper. There are occasional branches in this part of the vein in which the ores are more concentrated, and the whole length exposed in the 10. I think 15 to 16 fms. is nearly uniform. This portion of the vein from its hardness, and the mundic associated with the copper ores, would be difficult to treat, but the importance we attach to it arises from the fact that to all appearance it exactly corresponds with the under portion of the old vein at the Huntington Mine at those points where that vein made the largest deposits of ores, and I hope to be able to corroborate you a similar result being obtained at this mine.

**MISSOURI.**—Advices received from mines, dated Sept. 13, state: Since our report of Sept. 1 the following work has been done: St. Clare shaft has been

timbered, divided, and laddered way put in complete to the 315 ft. level, and the new levels started north and south from the shaft on the lode. The pump has been lowered to position, and everything put in thorough order for opening up the new ground. In the 245 ft. level north the winze has been sunk 12 ft., the lodes averaging 1 foot at this point and producing 2½ tons of ore per fathom; ½ fathoms of ground have been stope in back of 245 ft. level, producing in ore ½ ton to the fathom. The stopes are running up well, and indicate a yield of 2 tons to the fathom at present. Engine-shaft has been cleaned out, re-timbered, and divided to a depth of 35 ft. The drifts from the shaft show the lodes to have been very large. We have selected and purchased in St. Louis a powerful pump, with ample capacity to deal with a larger volume of water than we are likely to have at 400 or 500 ft. down. The machinery will be on the ground and set as soon as it will be required. Bald Hill shaft No. 2 has been sunk 11 ft., with indications same as reported on. The tunnel has been driven 14 ft., with the ground holding in favourable indications.—Smelting: One Scotch hearth has been kept running steadily this month.

**BONITA VENTURA.**—*Sept. 29:* The 50, driving east of Cox's engine-shaft, and the same level driving west of Cox's engine-shaft have been idle during the past fortnight owing to our having stopped the engine to rebuild the crank loading. The water will be in fork by to-morrow, when driving will be resumed. In the 40, driving west of Cox's engine-shaft, there is a large kindly lode, yielding fine lumps of ore, valued at 1 ton per fathom. The lode in the 40, driving east of Cox's engine-shaft, contains a little ore, but not sufficient to value. The lode in the 20, driving east of Taylor's engine-shaft, is small, containing a few spots of ore, but nothing to value. In the 25, driving east of western boundary, the lode is very regular, consisting of carbonate of lime, quartz, and stones of ore. The ground in Budd's shaft is hard for sinking below the 65. We estimate the raisings for October (five weeks) at 300 tons.—Quintinios Mine: The 100, driving east of Taylor's engine-shaft, continues hard and unproductive. The 90, driving east of Taylor's engine-shaft, is in advance of the 80, driving east of western boundary, the lode is hard and unproductive. The 80, driving east of western boundary, the lode is hard and unproductive. The 70, driving east of San Adriano shaft, produces occasional stones of ore, but not sufficient to value. No improvement has taken place in the 60, driving east of San Victor shaft. The 70, driving east of San Victor shaft, is opening up a fine piece of tribute ground, worth 3½ tons per fathom. The lode in the 70, driving west of San Victor shaft, is regular and well defined, producing ½ ton per fathom. Taylor's engine-shaft, sinking below the 115, has reached the required depth for a 130 ft. level. Gregorio's winze, sinking below the 10, is holed to the 70. The usual weekly weighings of ore were continued regularly throughout the past month, and the stopes are now without any change of importance. The works at surface are kept on with their usual regularity, great attention being paid to economy. Cox's engine is in good condition, and working cheaply.

**ALAMILLAS.**—*Sept. 29:* The lode in the 115, driving west of Taylor's engine-shaft, is large and strong, but it has fallen off in value within the last fortnight; its present worth is 1 ton per fm. In the 100, driving in the same direction the lode is of a kindly appearance, and producing good stones of ore. The 85, driving west of San Adriano shaft, produces occasional stones of ore, but not sufficient to value. No improvement has taken place in the 60, driving east of San Victor shaft. The 70, driving east of San Victor shaft, is opening up a fine piece of tribute ground, worth 3½ tons per fathom. The lode in the 70, driving west of San Victor shaft, is regular and well defined, producing ½ ton per fathom. Taylor's engine-shaft, sinking below the 115, has reached the required depth for a 130 ft. level. The 100, driving east of Taylor's engine-shaft, the lode is small, but very compact and regular, producing 1 ton of lead ore per fathom. The new winze, No. 3, sinking below the 10, is situated west of Taylor's engine-shaft, and in advance of the 20, and worth 1 ton per fathom. The works at surface are kept on with their usual regularity, great attention being paid to economy. Cox's engine is in good condition, and working cheaply.

**PONTIBAU'D.**—*Oct. 1: Roure:* The 200 metre level, south of Taylor's shaft, is in a strong lode, composed chiefly of quartz, spotted with lead ore. The same level north continues to be driven on a regular lode, composed of jointed quartz, spotted with mundic; the lode is unproductive. The 175 metre level north continues to be driven on a regular lode, composed of jointed quartz, spotted with mundic; the lode is unproductive. The 175 metre level south continues to be driven on a regular lode, composed of jointed quartz, spotted with mundic; the lode is unproductive. The 150 metre level south continues to be driven on a regular lode, composed of jointed quartz, spotted with mundic; the lode is unproductive. The 100 metre level south, on Virginie's lode, yields a little low quality ore-stuff. The 80 metre level south, of cross-cut, on the eastern part of the lode, yields stones of ore-stuff irregularly; the same level north yields ½ ton of ore per current metre. There is no change to mention in the value of the tribute pitches at Mioche.—La Brousse: The 160 metre cross-cut, west from Alice's shaft, has intersected the lode, which at this point is 1 metre wide, composed of quartz, spotted with ore. The 140 metre level south continues on a strong lode, producing low-quality ore-stuff. The 120 metre level north is holed to the 100, and the driving of the 120 resumed; the lode in the end shows spots of ore. The 100 metre level north is unproductive. The cross-cut in the 100 metre level, south of this shaft, has intersected a vein on which we have set to drive, and which produces good stones of lead ore. The 80 metre level south is unproductive.—Pranal: The 110 metre level, south of St. George's shaft, yields ½ ton of ore per current metre. The 90, north of same shaft, yields ½ ton of ore per current metre, and the same level south yields ½ ton. The 70 metres level north continues to be driven on a regular lode, which has met with the lode, which at this point is 1 metre wide, composed of quartz, spotted with ore. The 50 metres level south continues to be driven on a regular lode, which has met with the lode, which at this point is 1 metre wide, composed of quartz, spotted with ore. The 30 metres level south is unproductive. The 30 metres level south is unproductive. The 20 metres level south, on which we have set to drive, and which produces good stones of lead ore. The 20 metres level south is unproductive.—Pranal: The 110 metre level, south of St. George's shaft, yields ½ ton of ore per current metre. The 90, north of same shaft, yields ½ ton of ore per current metre, and the same level south yields ½ ton. The 70 metres level north continues to be driven on a regular lode, which has met with the lode, which at this point is 1 metre wide, composed of quartz, spotted with ore. The 50 metres level south continues to be driven on a regular lode, which has met with the lode, which at this point is 1 metre wide, composed of quartz, spotted with ore. The 30 metres level south is unproductive. The 30 metres level south is unproductive. The 20 metres level south, on which we have set to drive, and which produces good stones of lead ore. The 20 metres level south is





considering that many thousands of pounds worth of lead and blende that have been raised from a depth which so far has scarcely exceeded 20 fms. from surface, it is a matter of surprise that the district has not already received the vigorous development it deserves. Fashion, however, as in many other things, has much to do with the neglect of this really rich district; but although it has not yet taken the rank it merits, it is a matter for congratulation that there are now in course of steady development two or three mines which are long will show what the district can produce, and will cause it to attain the rank it certainly deserves. Taking D'Eresby Mountain as one of the leading mines, it is something to be able to point to a lode which at a shallow depth can show 2 ft. solid lead. What would be thought of such a lode in Cornwall? The shares of such a mine would become at once "market favourites." The great Gorse lode of D'Eresby Mountain, which is decidedly a champion lode, is a very remarkable one. It is of a strongly ore-bearing character, and is very rich in both lead and blende. The ancient workers must have raised enormous quantities of mineral from it. They have left large workings at a shallow depth, but owing to water could never explore beyond a certain depth. It is the mission of the D'Eresby Mountain and kindred companies to go below the "old men." There is no reason whatever why they should not find rich deposits of mineral, for the "old workers" undoubtedly found some splendid deposits. The Gorse lode in its northward course from D'Eresby Mountain passes through the eastern end of Great D'Eresby Mine, and thence through Treffry Mine, whence it passes (according to a survey made expressly for the writer) through the mineral lands above Clementina, and so on through the North D'Eresby Mountain sett, a young and promising mine, which we may say is the northern boundary of the D'Eresby Mountain district. At this mine the discoveries, considering the depth, are really extraordinary. There are some four adits, in all of which good lead has been met with, but just at the moment the chief point is in No. 2 adit, where there is a fine lode in the end—as promising a lode as a mine could wish to see. It is the opinion of many well qualified to judge that this is the famous Gorse lode, which, as we have seen, has just been cut in depth so rich at D'Eresby Mountain. But when it is cut in depth—and the present management will undoubtedly make it their business to thoroughly develop it—a rich lode may be expected by the shareholders. We wish them all success in their adventure. We are not ourselves interested in the mine, but knowing the district we say, "Develop your property, and you will be well rewarded."

JAMES H. CROFTS.

P.S.—FRIDAY, 4 P.M.: Tin has risen to 85½.—a rise foreshadowed above.

### TO THE METAL TRADE

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### The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, OCT. 8, 1880.

IRON.	£ s. d.	£ s. d.	TIN.	£ s. d.	£ s. d.
Pig, G.M.B., f.o.b., Clyd...	2 10 0	—	English, Ingot, f.o.b...	88 0 0	—
Scotch, all No. 1 ... 2 11 0	—	—	Bars	89 0 0	—
Bars, Welsh, f.o.b., Wales	5 0 0	—	refined	90 0 0	—
" in London	5 10 0	5 15 0	Australian	85 0 0	—
" Stafford	7 0 0	7 10 0	Banca	85 15 0	86 0 0
" in Tyne or Tees	5 10 0	5 15 0	Straits	85 0 0	—
" Swedish, London	9 10 0	10 0 0	COPPER.		
Rails, Welsh, at works	5 5 0	—	Tough cake and Ingot	64 10 0	65 0 0
Sheets, Staff., in London	8 0 0	8 10 0	Best selected	65 0 0	—
Plates, ship, in London	7 5 0	7 10 0	Sheets and sheathing	70 0 0	71 0 0
Hoops, Staff.,	7 0 0	7 10 0	Flat Bottoms	73 0 0	—
Nail rods, Staff., in Lon.	6 10 0	—	Wallaroo	71 0 0	71 10 0
LEAD.			Burra, or P.C.O.	69 0 0	—
English, spring	13 0 0	19 0 0	Other brands	66 10 0	67 10 0
" cast	30 0	40 0 0	Chili bars, g.o.b.	66 0 0	66 10 0
Swedish, keg	15 0 0	—	PHOSPHOR BRONZE.		
" fag. han.	15 10 0	—	Alloys I., II., III., and IV.	£120 0 0	—
LEAD.			VI. and VII.	135 0 0	—
English, pig, common	15 5 0	—	XL, Spl. bearing metal	112 0 0	—
" L.B.	15 15 0	—	BRASS.		
" W.B.	17 0 0	—	Wire	6 1/4 d.	—
" sheet and bar	16 5 0	—	Tubes	9 1/2	—
" pipe	16 15 0	—	Sheets	8 1/2	9 d.
" red	17 10 0	18 0 0	Yel. met. sheath. & sheets	6 1/2	—
" white	22 0 0	24 0 0	TIN-PLATES.*	per box.	
" patent shot	18 10 0	—	Charcoal, 1st quality	1 2 0 1 4 0	—
Spanish	15 0 0	—	2nd quality	0 19 0 1 1 0	—
NICKEL.			Coke, 1st quality	0 18 0 0 1 1 0	—
Metal, per cent.	15 0 0	16 0 0	2nd quality	0 17 0 0 1 1 6	—
Ore, 10 per cent. per ton	20 0 0	25 0 0	Black	per ton	15 19 0
QUICKSILVER.			Canada, Staff. or Gla.	12 0 0	—
Flasks, 75lbs., war. (nom)	6 17 6	—	Black Liverpool	12 0 0	—
SPELTER.			Black Tugger, 450 of	30 0 0	—
Silesian	18 15 0	17 0 0	14 x 10	—	—
English, Swansen	18 0 0	—	Price on 30th Sept.	£6 17 6	£6 2 6 £6 17 6
sheet zinc	21 0 0	21 10 0			

\* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than IO quoted above, and add 6s. for each X. Terne-plates 2s. per box less tin-plates of similar brands.

**REMARKS.**—There is no new feature of any importance to be recorded as regards the state of the metal market. The existence of a fair shipping demand, combined with a moderate number of orders for consumption, has spread a salutary feeling over the markets, and prices for the most part have not been subject to violent fluctuations, but have on the whole continued fairly steady, which is very desirable, as the markets are not strong enough to admit of wide fluctuations, and steadiness in quotations at the present time is undoubtedly the best and most effectual method of restoring confidence amongst buyers; for were prices to fluctuate materially, it might produce an injurious effect upon our markets, by keeping them in too sensitive a condition, and buyers would be unable to place any dependence upon the markets. With the exception of tin, speculators are not giving our markets much attention at the present time, evidently preferring to wait and see how the Eastern Question shapes itself before renewing operations of any magnitude in metals generally. Considering that present affairs are in too critical a state to warrant any movement on their part, and notwithstanding that other circumstances may be favourable for an expansion and development of the legitimate demand, yet in view of serious difficulties arising in the East, which might possibly culminate in a European war, operators deem it more advisable to withdraw from the markets, if not altogether, certainly in a great measure, until the political horizon assumes a clearer and more settled aspect. Their absence, however, does not prove at all injurious to *bond fide* trade, and the non-existence of a speculative demand will probably do much in increasing the trade requirements, by keeping the present moderate rates stationary, or perhaps by reducing them to still lower figures. The continuance of low rates also may possibly be beneficial to the trade by forming some check to the too heavy supplies of many metals; and as the large supplies are now causing some anxiety, it would appear that if the absence of speculation prevents prices from rising, whereby the supplies are curtailed, there will be no reason to regret that metals have been kept for a while below their average value.

**COPPER.**—This market remains very steady, and with the exception of shipping orders for manufactured, chiefly for India, the demand is quiet. Holders do not appear at all inclined to increase their stock, nor, on the other hand, are they particularly anxious to press sales. The improvement in the statistics for the month of September gave a temporary stimulus to prices for Chili bars at the early part of the week, but as buyers have not followed up their market, quotations have again fallen away, and purchases made down to 60s. The total visible stock on the 1st inst. was reduced to 60,967 tons, to 63,192 tons on the 1st of September, and it may be interesting to note that the stock has not been as low as at the present time since the 1st of February last, when the stock was 59,644 tons, the nearest approach in the interval being on the 1st of May, when figures showed the stock to be 62,664 tons. Shippers have already given the low prices their attention, and large purchases have been effected, and those buyers who have secured their contracts at the present favourable prices may deem themselves fortunate, for manufacturers being well off for orders, are stiffening their prices, and refusing to accept orders at any thing below current rates. There is, however, not likely to be any improvement in prices for manufactured while the raw material can be purchased as cheaply as at present, and if manufacturers demand higher rates, it is probably only in such instances where the works are well occupied with present orders, and which make them think themselves entitled to somewhat better prices to make amends for any inconvenience which might be caused in delivering to time. At the public ticketing at Swansea on the 5th inst., 1808 tons of copper ores, of an average produce of 73 per cent., were sold at an average of 10s. 6d. per unit, against 11s. 1d. per unit at the previous sale, the average produce on both occasions being the same.

**IRON.**—The changes which have lately taken place in this market have been immaterial, prices continuing steady, while a moderate demand prevails for most descriptions. There is a fair shipping demand, and the exports which have been made for some time past being for large quantities, they suffice to restore the tone and give the market a temporary stimulus. The exports from London are not so large as might have been expected, but this probably arises not so much from any falling-off in the requirements of iron for the chief foreign markets, as from the present arrangement of chartering vessels direct from the

ports situated near to the works, and by which method buyers save the expense of bringing their iron to London, which was formerly incurred. There is, however, no material falling-off in the shipments from London, the deficiency chiefly being in the commonest descriptions of iron. For some time past the home consumption of sheets has been reported good, and manufacturers have realized rather better prices, but the improvement in prices for this description has been rather adverse to any increase in the demand for shipment. With regard to the exports of the raw material, they are still made in fairly large quantities, but do not compare well with the corresponding period of last year. This, however, is not a matter of much surprise, for previous to that period buyers had been purchasing so sparingly that their pressing wants forced them to effect purchases. Prices for pigs, however, are now much lower than they were a year ago, and this may possibly induce capitalists to invest in this metal, and thus give renewed animation to the market, but with the present heavy and constantly increasing stock, the permanent establishment of higher rates appears somewhat doubtful, as holders are likely to be thereby frightened into realizing. There has been a fair business doing this week on the warrant market, and a slight improvement has been effected in prices. On Monday the market opened at 49s. 9d. and receded to 49s. 4d., and on Tuesday down to 49s. was touched, the market recovering at the close to 49s. 4d. On Wednesday there was more tone, and business transacted from 49s. 6d. to 50s. 6d., closing at the best. Yesterday the market was strong in the morning, and 50s. 10d. one month was touched, but later in the day sellers became more numerous, and 50s. was the closing quotation. To-day the market has been steady, and business done chiefly at 50s. cash. The foreign and coastwise shipments last week were 11,725 tons against 15,638 tons for the corresponding week in 1879, and the total shipments from Christmas to date this year have been 539,566 tons against 405,226 tons in 1879, and 307,086 tons in 1878. The number of furnaces now in blast has been increased to 95. The stock in Glasgow on the 2nd inst. was 473,755 tons against 472,730 tons on the 25th ult. The imports of Middlesbrough pig iron into Grangemouth last week was 6,650 tons against 8,305 tons for the same week of last year.

The Cleveland market is reported quiet, and prices have assumed a rather declining tendency. Quotations for No. 3 are chiefly at 38s., and No. 4 forge at 37s.; about 1s. 6d. per ton above these rates is asked for warrants, stocks in this district, as in Scotland, continuing to greatly increase, the visible stock last Tuesday was 99,245 tons, or an increase of 2,245 tons. There is a fair demand for shipment, the exports of the raw material last month being 78,928 tons, and 19,725 tons manufactured iron and steel. The total stock in Middlesbrough, including that in makers' hands, is estimated at 283,710 tons, or an increase of 10,234 tons for the month of September. In this district the number of furnaces in blast has been raised to 118, of which 95 produce Cleveland iron, and the rest hematites, &c. The total number of furnaces in blast in the North of England is estimated at 166. There is not much alteration in the manufactured trade; a good demand continues for plates, and orders have been more plentiful, but prices have undergone no change, being quoted at 61. 7s. 6d. to 67. 10s. Bars and angles are selling from 51. 7s. 6d. to 57. 10s. Inactivity has marked the course of the Wolverhampton market, and but a limited amount of business has been transacted. Buyers' limits appear rather under what producers would accept, and consumers generally have deferred their orders until after the quarterly meeting next week. Quotations for sheets are fairly strong at 71. 10s. for singles, 91. for doubles, and 107. 10s. for latens. Marked bars, however, are expected to be reduced 10s. at next week's meeting, and sales have also been made in anticipation of the drop. At Birmingham, yesterday, the list sellers reduced the price of bars 10s. per ton, making the present quotation 71. 10s. This reduction is reported to have caused a depressing influence over the market, and buyers of unmarked iron for the most part refuse to pay previous rates. Common bars have ruled as low as 51. 10s., and prices for pigs have been weak, with only a limited business doing. At a meeting of manufacturers, yesterday afternoon, it was resolved not to reduce the price of sheets below 71. 10s. to 82. for the commonest descriptions of singles, the usual extras being paid for doubles and latens. The fall which has been made in prices at Sheffield has rather stimulated the demand, and some fair contracts have been placed. There are some good plate orders being received from shipbuilders, and iron merchants generally experience little difficulty in effecting sales. Bars in warehouse are quoted at 61. 10s. to 71. 10s.; hoops, 71. 10s. to 87.; and sheets, 81. to 87. 10s. Some of the works in Wales are said to be well off for orders, but the American demand not having attained such dimensions as was expected of it, causes a disheartening tone to prevail. Inquiries, however, from America are numerous, although the number of orders placed is limited. Recent advices from Sydney shows that dullness pervades every branch of the trade in that country. Consumers' requirements being small, sales are slow and prices depressed, without showing any immediate signs of improvement. There are less inquiries for galvanized iron, and reduced rates have been accepted. Fencing wire is also in more limited demand, No. 3 being quoted at 13. 5s., or a fall of 10s. per ton. A fair business is reported in Scotch pigs at 85s. for brands equal to No. 1 Clyde. Best brands of Staffordshire bar iron are quoted at 11. recent cablegram from New York shows that the Scotch pig iron market has further relapsed, the demand being less marked. No. 1 Garthsherrie and Glengarnock are quoted at 23 dols., Coltness at 24 dols., Eglington at 21.50 dols., being a fall of 2s. on each brand. There is a good demand for scrap and old rails, and the price of the latter has advanced 2s., being quoted at 27 dols., and scrap at 26.50 dols.

**TIN.**—A large business has continued to be transacted in this metal, but prices have chiefly assumed a downward tendency. On Monday the market opened for foreign at 85. 7s. 6d., and improved to 85. 15s., from which point there was almost one continuous decline until to-day. On Tuesday business was done from 84. 10s. to 81. On Wednesday and yesterday transactions were carried through chiefly between 83. and 82. 10s., but to-day there has been a better demand, and 85. has been paid. As regards the actual position of the trade, there appears nothing fresh to report; the deliveries continue good, which may perhaps tend to improve prices as soon as the market has a more settled appearance, but while such wide fluctuations daily occur in prices, it is impossible to foretell the immediate movement of the market. However, with a limited stock and good deliveries, it does not seem at all probable that any very marked reduction will be effected in prices yet awhile.

**LEAD.**—There continues to be a limited amount of business transacted in this metal; and notwithstanding the prevalence of reduced rates, buyers still appear disinclined to effect purchases beyond immediate requirements. Shipments keep limited, and the exports for the whole of this year are reported very much below what they were in 1879.

**SPELTER.**—The demand is slack; and although sellers do not appear unwilling to make slight concessions in order to secure orders, yet buyers for the most part are slow to avail themselves of the lower rates.

**STEEL.**—There is little or no change either in price or demand.

**TIN-PLATES.**—A fair demand continues, and prices are without alteration.

**QUICKSILVER.**—A slow trade without change in price. The Board of Trade returns just issued show the following statistical position:—

1878. 1879. 1880.  
9 months ending Sept. imports . 37,434 40,266 46,049 bottles  
9 months ending Sept. exports . 19,683 25,276 11,319 "

Price on 30th Sept. £6 17 6 £6 2 6 £6 17 6 "

The MINING SHARE MARKET has been rather dull and fluctuating this week, chiefly in sympathy with the metal markets, and very little general business has been transacted. The quotations, therefore, for the most part merely nominal.

**TIN.**—Soon after our last the smelters again advanced the standards for ore in Cornwall 2d. per ton; but, apparently, soon repented of the act, they dropped it again on Wednesday the like amount. It is no wonder, therefore, that tin shares have fluctuated almost daily, and so much so, that people begin to fear speculating in them at all. Carn Brea opened 80 to 85, and leave off 80 to 82½; Dolcoath, 54 to 56; Blue Hills, 3½ to 4; Cook's Kitchen, 11 to 11½; East Pool, 37 to 38; New Peevor, 2 to 2½.

Trevine, 2 to 2½; Polrose, 1½ to 2; South Cadbury, 11 to 11½; South Crofty, 13 to 14½; South Frances, 12 to 12½; Tincroft, 16 to 16½; West Basset, 15½ to 16; West Frances, 9½ to 10½; West Kitty, 2½ to 2½; New Kitty, 1½ to 1½; West Peevor, 15 to 16; West Phoenix, 2 to 2½; Wheal Agar, 5½ to 6; Wheal Basset, 4 to 4½. Wheal Grenville, 9½ to 10½; at the meeting the accounts—of which we gave the summary last week—were adopted and passed. Wheal Jewell, 2 to 2½; Wheal Kitty (St. Agnes), 4 to 5; Wheal Peevor, 28 to 29; Wheal Uny, 2½ to 3

very little to report, owing to the mine being closed down five days for thorough overhaul of machinery, which was then in thorough repair and working well. He writes (Sept. 15) that during the week operations both in the mine and smelting works have been carried on with the usual regularity. The 900 north cross-cut has been extended 27 ft. on a well-defined fissure, and in favourable ground for striking ore. The 900 north cross-cut has been extended 23 ft., the face of the drift is in very favourable ground for striking ore. The 900 north-west drift has been advanced 27 ft. on a regular seam, with very good indications for ore. The chambers are without any material change since my last. The furnaces are in good working order, and smelting large quantities of ore.

Ruby and Dunderberg, 6½ to 6¾; the usual weekly report has not been received, but there is a special report on the Dunderberg Mine from the company's superintendent, which states that there was "a marked improvement at several points," and that "there need be no apprehension as far as the mine is concerned." The weekly telegram is considered to confirm these views, as the output is steadily increasing. The decision against this company at the suit of a neighbouring mining company in Eureka has, it appears, been appealed against, and it is said that, even if this matter of surface rights were settled definitely and adversely to the Ruby Company, it would only affect a small portion of non-ore-bearing shale comprising a corner of one of the company's mines, for which a patent had not even been taken out.

South Tolcarne, ½ to 1; it is stated that all the shares offered to the present holders have been applied for and have been allotted.

In Lead Mine Shares there has been decided more doing, the Great Laxey accounts, prepared for presentation at the meeting next week, being much more satisfactory than was anticipated. Among unquoted mines an improvement is noted in several in the D' Eresby Mountain or Llanrwst district, and it is rumoured that with regard to several which have remained for some time in abeyance efforts will be made to resuscitate them. Van, 13 to 19; there is no particular change reported this week. The new lode to the north of the main lode has just been reached in the cross-cut. The main lode in the 120 west is looking well.

Grogwinion, 3 to 3½; the usual monthly sale of 100 tons of lead on Monday realised 102. 3s. 8d. per ton. The manager's report is of a pleasing nature, an important change having taken place in the deep adit east, which it is thought may prove of vast benefit. It appears that a cross-course has been intersected at the most advanced point in this part of the mine similar to several others that were found in the western workings, and which resulted in great discoveries of lead. Should it prove so in this case, of which there seems strong probability, its importance could scarcely be over-estimated, as it would be in virgin ground, and something like 100 fms. of "backs" would exist overhead. This would, of course, mean an immense addition to the "reserves" of the mine. The lode in the new shaft below the level of the river maintains its productive character, and is yielding large quantities of lead, with every indication of further improvement.

Frongoch, 3½ to 4½; a parcel of 150 tons of blonde has been sampled, for next week, the report stating that a further quantity of both blonde and lead will be sold during the month. Operations continue to yield good results, and the continued exploration of the mine is bringing to light large reserves of mineral far in excess of the estimation formed at the outset. It is considered satisfactory that the 154, or deepest level, is being extended "in a valuable and promising lode," ground yields a good amount of lead. Forebore produces well and betokening further improvement. The manager states this point is "undoubtedly a continuation of the main body of ore ground from which such large returns were made in the upper levels," and they have every reason to believe that they will soon open out "an important section of profitable ground at this the lowest part of the mine." All other points of operation are, as will be seen from the report, doing well, and it is stated the raisings of lead are being steadily increased. We understand that some very fine specimens of ore from the bottom of the mine have been received at the offices, also some extraordinary blonde.

New Wye Valley, 1 to 1½. The usual monthly report will be found in another column. The deep level is producing well at No. 1 cross-cut, and there are indications of further improvement. Nothing particularly new at other points of operation, but satisfactory progress making everywhere, and a fair quantity of lead being raised. Red Rock, 1½ to 2. The appearance of the lode in the eastern working is still indicative of early improvement.

Ystwith, 1 to 1½; the new water-wheel has been started, and everything working admirably, and no time will be lost in fully proving the lode at the new shaft, for which purpose this machinery has been erected. The lode fully maintains its size, and prospects are in favour of further discoveries at an early date. The cross-cut is not yet through the lode at the adit level east. The lode is found to be very large, and of favourable composition, and is producing some lead. Altogether prospects are considered very good.

Crosswood, 1 to 1½; the clearing up of the level at Pantreherion Mine has resulted in a fine discovery of lead, and a shaft is to be sunk on it forthwith. Much interest is attached to this discovery, as the mine immediately adjoins Grogwinion, and the lode is identical in character to the best lodes in that property. Caron, 1½ to 2; there is now a full supply of water for pumping, and the mine is again in full work. The 22 is close up to the run of ore ground discovered in the 10, and the same will, it is expected, be intersected very soon.

British Silver-Lead, 2 to 2½; there is said to be good ore in the eastern shaft and the western, so that when the dressing machinery is erected sales of ore may be made. Plas-ddu Park, 10 to 12; ore it is said may be seen on the surface from the Maes-y-pwll lode.

At Gwern-y-Mynydd the various works are progressing exceedingly well. The levels from Deborah shaft have been started both north and south to cut the lodes lying in each direction not many yards from the shaft.

Pateley Bridge, ¾ to 1; No. 4 vein in the 20 has been cut, and laid open a course of ore 20 fms. in length, and good in both ends. The 30 end is close upon reaching this vein.

[The closing quotations being given in the Share List on the last page of the Journal it is unnecessary to repeat them here.]

At Redruth Ticketing, on Thursday, 1088 tons of ore of 8½ average produce, and containing 95 tons 8 cwt. of fine copper, were sold for 5027. 15s., being 47. 12s. 6d. per ton of ore; 10s. 6d. per unit, or 52. 14s. per ton of fine copper in the ore, and an average standard of 84½. 1s. Subjoined are the particulars of the two last sales:—

Date. Tons. Standard. Produce. Per unit. Ore copper. Sept. 23. 3692 ... £90 5 0 ... 6½ ... £3 8 6 ... 9s 10d. ... £49 4 0 Oct. 7. 1088 ... 84 1 0 ... 8½ ... 4 12 6 ... 10 6½ ... 52 14 0

Compared with the last sale, the advance has been in the standard 12. 3s. 6d., and in the price per ton of ore about 2s. 2d.

At Swansea Ticketing, on Tuesday, 1808 tons of ore of 7½ average produce, and containing 141 tons 7 cwt. of fine copper, were sold for 7419. 13s., being 47. 2s. per ton of ore, 10s. 6d. per unit, or 52. 9s. 10d. per ton of fine copper in the ore, and an average standard of 78. 19s. 6d. for 9 per cent. produce. Subjoined are the particulars of the two last sales:—

Date. Tons. Standard. Produce. Per unit. Ore copper. Sept. 21 ... 1553 ... 3 0 ... 7½ ... £4 7 0 ... 11s. 1½d. ... £55 9 6 Oct. 5. 1088 ... 78 19 6 ... 7½ ... 4 2 0 ... 10 6 ... 52 9 10

Compared with the last sale, the decline has been in the standard 3. 3s. 6d., and in the price per ton of ore about 5s. The Betts Cove ore gave a produce of 7½, and sold at 10s. 7d. per unit; Caveira, produce 8, per unit 10s. 4½d.; Tan-y-Bwlch, produce 13 9-16th, per unit 11s. 0½d. There will be no sale on Oct. 19.

INSURANCE SHARES have, according to this evening's report of Mr. W. L. Webb, of the Stock Exchange and Finch-lane, been dealt in as follows:—Atlas, 17 to 17½; Commercial Union, 21 to 21½; Eagle, 5½ to 5½; Fire, 3 to 3½; Imperial Life, 14½ to 15; Indemnity, 104½; Lancashire, 8½; Law Fire, 15½ to 15½; Life, 117 to 118½; Legal and General Life, 12½; London, 64 to 64½; Liverpool and London, 19½; Queen, 4½; Ocean, 8; Royal Exchange, 400 to 402; Rock, 8½ to 8½; Union, 410 to 412; Universal, 10½. Marine Insurance share firm, others unchanged. For closing prices see list on last page of Journal.

GAS SHARES.—The principal business in these shares, according to this evening's report of Mr. W. L. Webb, of the Stock Exchange and Finch-lane, has been in Bahia, 15½ to 15½; Bombay, 8½ to 8½; new, 4½ to 4½; Commercial, 19½ to 19½; continental, 9½ to 9½; Gaslight, A, 17½ to 18½; 5 per cent. pret., A, 17½ to 17½; C 10 per cent., 22 to 22½; H 7 per cent. max. 13½; Imperial Continental, 187½ to 191½; Monte Video, 16½ to 18½; Oriental, 7½ to 7½; Rio de Janeiro, 23 to 24; South Metropolitan, B, 182 to 185. Gas stocks still flat, on electric scale. For closing prices see list on last page of Journal.

TRAMWAYS.—The closing prices of this evening, as quoted by Mr. W. Abbott, of Tokenhouse-yard, are given in tabular form in the last page of the Journal.

\* With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: Original Correspondence; Colliery Explosions (W. T. Mulvaney); Explosions in Coal Mines; Colliery Explosions; Gunpowder in Coal Mines; Col. Shakespear on Colliery Ventilations; Mining in Colorado—Alma District No. XI (C. Richardson); Canadian Mining Notes; Miners' Work—America and Cornwall—No. II; Flagstaff Silver Mining Company (J. Heath); Russian Coal Fields—Iron—No. IV; Tin Mining in Cornwall and Australia (R. Boys); Mining in Algeria No. II; the Cape Copper Company; the Indian Gold Companies; Gold Mining in the Dutch West Indies; Mining—Practical and Theoretical (E. Baise); Technical Education for Miners, as applied to Practical Mining and Mine Management; Home Mines and Foreign Mines; Mining Accounts (J. B. Reynolds); Cheap Shares—Penhalls' Tarkerville Mining Company; Camborne—Its Mines, &c. (R. Symons); Wheal Peverar and West Kitty (J. B. Reynolds); East Wheal Rose (R. Symons); Morfa Du; History of Tin Mining in Bohemia and Saxony; Signalling from a Cage—Reval Tin Mining in the Tavistock District; Meetings of Wheal Grenville, West Pateley Bridge, Isle of Man, West Wheal Seton, Llanares, Fortuno, and Ballein Companies, &c.

LISBURNE MINES.—The annual meeting of this company was held at Queen-street Place, on Sept. 30, when Messrs. John Taylor and Sons, the managers, presented a satisfactory report upon the results obtained from the mines during the year ending June. The profit made was 2719. 14s. 8d., out of which four quarterly dividends

of 17. each per share, amounting to 1600. have been paid, and an extra dividend of 2½ per share, amounting to 800. was paid on Oct. 5, and the sum of 319. 14s. 8d. added to the current balance. The capital of this company is 7500. divided into 400 shares of 18. 15s. per share.

EAST DEVON CONSOLS.—The important discovery at this mine still continues as good as ever. The adit end is of the same congenial nature, and is producing good work for copper. It is, indeed, most promising lode.

WHEAL HONY AND TRELAWNY UNITED SILVER-LEAD MINING COMPANY.—A consultation was held, on Thursday, at the mines, between Messrs. Loam and Son, of Liskeard; Capt. Josiah Thomas, of Dalcoath; Capt. William Hancock, and the directors of the company, as to the commencement of active operations in forking the mines, the result and particulars of which will appear in our next issue.

MELLANEAR COPPER MINE.—At a meeting of the directors held on Thursday a dividend of 2s. 6d. per share free of income tax was declared payable on Nov. 3 next.

NANT-Y-CRIA.—Those whose memory can carry them back 40 years will remember the building (now the Devonshire Club) at the top of St. James'-street, London, as the renowned gambling house of Messrs. Crookford. We publish to-day, in our sales of blonde from the mine of Nant-y-Cria, in Cardiganshire, the first returns for many years of ore from this mine, which was formerly worked by Crookford. We understand the Crown has given way on the point of royalties, and if they would extend the same policy to other properties they would not only do much to assist the depressed metal interests, but give employment to many districts now suffering from want of work. There are many Crown mines worth attention if only a "live and let live" policy were adopted.

NEW KITTY.—The proceedings at the recent meeting have produced just the impression that might have been expected. The mine appears to be now stamped in the estimation of those concerned as one of acknowledged value. After a time there will be more to say of the undertaking. The situation of the mine, the economy of its management, and the reputation of its officials all command it to the favourable notice of investors.

DEVON GREAT UNITED.—On Wednesday last the engine was started on this mine and water brought to surface, in the presence of probably the largest and most influential gathering of shareholders and visitors ever assembled on a Devonshire mine. The proceedings passed off without a hitch of any kind, and Mr. Peter Watson, the chairman; Mr. Moses Bawden, the purser, and the other gentlemen associated with them in this promising mining venture, were warmly complimented and congratulated upon the efficiency and dispatch with which the works have been pushed forward. The proceedings are reported so fully in another page that further reference to the subject is unnecessary; suffice it to say that the united testimony of mining experts in the district verifies, to the fullest extent, the hopes which have been held out that Devon Great United will turn out a permanent and highly remunerative undertaking.

THE IRON TRADE.—The estimated stocks of pig-iron in Scotland are 500,000 tons. Some 40 furnaces are in blast, whereas before the strike there were 117. The Middlesborough stocks are upwards of 100,000 tons, and the monthly production some 220,000. The production and stocks never were so extensive.

\* \* \* We are reluctantly compelled at the last moment to omit an interesting article "On Gold Quartz and its Treatment," which will appear in the next Number of the Journal.

#### TO SHARE BROKERS, INSURANCE COMPANIES, AND PROMOTERS.

THE ADVERTISER OFFERS SPECIAL FACILITIES FOR ADVERTISING NEW COMPANIES and SHARES FOR SALE at a NOMINAL COST.

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WANTED, a SECONDHAND BUCKET WHEEL, from 40 to 45 feet diameter, and from 3 to 4 feet breast.

Forward particulars and price to "Manager," Florida Mine, Strata Florida, South Wales.

#### CHEMIST AND REDUCTION OFFICER.

WANTED, by a Gold Mining Company in the Tropics, a CHEMIST AND REDUCTION OFFICER, who thoroughly understands the amalgamation process, and the concentration and treatment of tailings.

Apply, by letter, with copies of testimonials, to "H. F.," care of Kensington and Co., 2, George-street, Mansion House, London, E.C.

#### TO MERCHANTS, AND OTHERS.

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Full particulars from Messrs. THOMPSON and Sons, Plymouth.

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Is a BUYER of—150 Hornachos, 50 Prince of Wales, and 5 D' Eresby Mountain, And SELLER of—10 Universal Steam Tram Car Construction Company, 5 Ruby and Dunderberg, 50 East Creb, 20 West Creb, 100 West Caradon, 20 Grogwinion, and 50 Lady Ashburton.

Business in Foreign Mines at the market price of the day, and shares negotiated not having a daily market value.

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RICO SILVER MINING COMPANY OF COLORADO (LIMITED LIABILITY), CHICAGO, U.S., carefully managed at small expense. Profits of 100 per cent. per annum are expected, much more may be realised. The property of the company is at Rico, on the Rio Dolores, in South-Western Colorado—a district containing the richest and most easily worked Silver and Gold Mines in the World.

The company offer working capital shares, fully paid, on extremely favourable terms to the investor.

For prospectus and information, write to J. J. WEST, 245, Wabash Avenue, Chicago, U.S.

## NOTICES TO CORRESPONDENTS.

\*\* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt; it then forms an accumulating useful work of reference.

CONSTANCIA MINES, CHILI.—The address of the London Representative of these mines is required for by a Manchester Correspondent. If sent to the *Mining Journal* Office it will receive attention.

MANGANESE.—If "Inquirer" will forward his name and address, through the Editor of the *Mining Journal*, I will communicate with him on the subject.—W. A. H.

FIJANGUI MINING COMPANY.—It would be advisable to correct a slight error—two errors—in your correspondent's letter, signed "Investment," in the Supplement to last week's *Journal*. The 1004 oits. of gold alluded to should have been stated worth 426L 14s. instead of 262L 14s., and the produce 2891 oits. of gold was July month's produce, not August, as he has stated; for August report is not as yet in the shareholders' hands, at least not in those of A SMALL SHAREHOLDER.

AVIS IMPORTANT—AU X ABBONNEMENTS ETRANGERS DU "MINING JOURNAL."—A cause de la CONVENTION POSTALE INTERNATIONALE il y avait à partir du Juillet, 1875, une diminution du prix de l'abonnement au *Mining Journal* pour bien des pays dont le taux des postes était jusqu'à bien élevé. A présent le prix de l'abonnement est de 35 francs, le port compris pour l'Autriche, Belgique, France, Danemark, et ses dépendances, l'Egypte, l'Allemagne, la Grèce, l'Italie, Hollande, Portugal, et ses dépendances, Roumanie, Russie, Serbie, Suède, la Suisse, la Turquie, l'Afrique septentrionale, Venezuela, et tous les autres pays de l'Union Postale. L'abonnement est payable par anticipation ou par mandat postal internationale ou par autre mandat sur Londres. Le montant, si l'on le veut, sera touché à domicile la fin de l'an, mais en ce cas nous tirons avantage, sans aviso, et sur le dos de la note. L'abonnement continuera sauf avis contraire.

Received,—"R. W."—"E. H."—"J. D. C."—"S. H."—"N. K." (Aldersgate) should apply to a share-dealer—"H. M." (South Tolcarne)—"C. F. B."—"A. M."—"A. U. H."—"W. A. H."—"W. B. C."—"W. R. R." (West Seton)—"J. S. M."—"H. B." (Sheffield)—"J. A." (Dalston)—"W. G. C."—"J. O. S."—"E. E. B."—"H. B." (Liverpool)—"R. L. L." (Temple)—"W. W. C."—"J. L." (West Chiverton); The letter has been forwarded as requested—"W. W." (Rainford); The copy of the work has not yet reached us—"Shareholder" (Wheat Uny)—"Constant Reader" (Southampton)—"Shareholder in Several Gold Mines" should apply to his broker—"J. P."—"W. B. S."—"T. R." (Liverpool) should write to a share-dealer—"J. W. W."—"An Original Shareholder" (Grogwinion); Next week)—"A Large Shareholder" (Flagstaff).

THE MINING JOURNAL,  
Railway and Commercial Gazette.

LONDON, OCTOBER 9, 1880.

## THE VENTILATION OF MINES.

As the time of the year is fast approaching when atmospheric changes of a sudden nature frequently take place, our attention has been directed to the matter by one of the most practical mining engineers in the West Riding of Yorkshire, so that managers should pay the greatest attention to the ventilation of their mines. They should be well acquainted with the proportions of atmospheric air as well as with the nature of the gases given off in mines so far as they affect the ventilation. It should be known that there is constantly a pressure of nearly 1 ton to the square foot in every direction in the air near to the surface of the earth, owing to the weight of the air above it, so that the latter must either increase or the amount of pressure must be lessened in order to put the air in motion. It is the amount of this increase or decrease, and not the entire pressure, that puts the air in motion and overcomes the friction in mines. If the case of two shafts were taken of equal depth, the tops and bottoms being on the same level, extending from one to the other at the bottom, and the weight of air in one shaft being equal to that in the other, the temperature and other conditions being the same, the two columns of air would equally counterbalance each other, so that there would be no motion in the air, and, therefore, no ventilation. Even were one shaft much larger than the other the air it contained could only press upon that in the smaller one, the air contained in the larger shaft resting or pressing upon the sides of the shafts or airways at the place where the area is lessened, and not upon the air in the smaller shaft. The air in the one will balance that in the other if the density of the air is the same in each. If there is a furnace or a fan in a pit the air in the pit becomes heated, and expands or becomes lighter in bulk. The cold air in the other, or downcast pit, then overcomes the lighter air in the upcast, and pushing it up the shaft and around the workings before it, and so goes to the surface as it gets heated in passing over the furnace and around the workings. The weight of the atmosphere is of great importance. It is 815 times lighter than water, and at the level of the sea, with the thermometer at 60° Fahr., and the barometer at 29 8-10 in., the weight of 100 cubic inches is 31 grs. Above the level of the sea, to the height of about 2½ miles, the weight of 100 cubic inches is found to be half that stated, and the barometer falls to about 14½ in. In descending a coal mine 1000 ft. in depth the barometer will rise about 1 inch, higher than on the surface. In a shaft 900 ft. deep, and assuming the mean temperature of the downcast to be 40°, and the upcast 80°, the pressure on the downcast producing the ventilation would be upwards of 71½ lbs. per square foot, and that of the upcast about 64½ lbs., making a ventilating pressure of 5 lbs. per square foot. The downcast temperature remaining at 40°, and the upcast being raised to 120°, increases the ventilating pressure to 10 lbs. per square foot area of shaft.

If on a summer's day the mean temperature of the downcast shaft is increased to 60° the ventilating pressure will be reduced 3 lbs. per square foot. Although not strictly correct we are told that it may be taken as a practical and reliable result that with shafts 900 ft. in depth, every 10° for the difference of the temperature produces from 1 to 1½ lb. per square foot of area of shaft difference of ventilating pressure on furnace power. As to fire-damp finding its way as it does to the highest places in every mine if allowed to take its natural course, the workings should be so arranged and the air-currents as well, so that the tendency of the fire-damp and the direction of the currents should both proceed in one direction, and with one object—preventing the accumulation of the gas and assisting its natural endeavours to attain the highest level—the atmosphere outside of and above the level of their pits. To do this the ventilation must ascend up through the goaves, and the workmen should not be employed at their upper edges. This principle is of the greatest importance, and the workmen should be careful to place no impediments in the way of its being carried out, and paying special attention to the lamps, doors, sheets, as well as proving the roof and spragging the mineral, and reporting any signs of danger. Fire-damp, it may be said, does not all explode, even in the most extensive blasts, so that when an explosion takes place in pits having a large quantity of air circulating they are the most terrific, owing to there being plenty of air to form an explosive mixture. One volume of carburetted hydrogen gas when exploded produces 780 times its own bulk of flame. This will give some idea of its destructive power in a confined district. The force of the explosion is equal to a pressure of 555 lbs. on the square inch. A similar result follows the approach of a light to a mixture of the gas with air, because the latter contains oxygen, but in consequence of the oxygen of the air being diluted with nitrogen the explosion is more feeble than when the fire-damp is mixed with the oxygen. But though the explosion is comparatively light it is really powerful after all, being calculated to exert a pressure to the extent of 210 lbs. to the square inch. After an ex-

plosion follows the deadly after-damp, which is composed of eight volumes of nitrogen, two volumes of aqueous vapour, and seven volumes of carbonic acid gas. With danger on all sides, it is to be hoped that our mine managers will use more than ordinary precautions during the winter months, so that we may not have to record any more disasters such as that at Seaham.

## THE COLONIAL DEMAND FOR OUR RAILS.

The intelligence which has reached us this week from the Australian group of colonies must be regarded by our ironmasters as decidedly favourable. The Australian railways are almost, if not entirely, in the hands of the various Australian Governments; and, therefore, it is of extreme importance that the treasures of those Governments should be in a satisfactory condition. Well, the revenue of Queensland, South Australia, and New South Wales has experienced a substantial revival this year. The finances of those colonies were in a by no means forlorn plight even in 1879, and they were enabled to issue bonds last year at 4L 5s. or 4L 10s. per cent. per annum; still, it is satisfactory to find that their revenue has a tendency to increase, as their credit must become still stronger in consequence. Canada has benefited from the extraordinary prosperity enjoyed by its great neighbour the United States, and in India the construction of State railways will probably be prosecuted with more vigour now that the Afghan war seems drawing to a close without any loss of prestige having been sustained by the British arms. All these circumstances seem to lead to the conclusion that a considerable demand will continue to prevail for our railway iron on colonial account. The shipments actually made to the four principal groups of colonies were as follows in the first eight months of this year, as compared with the corresponding periods of 1879 and 1878:—

	1878.	1879.	1880.
British America	Tons 25,065	38,047	69,456
British Africa	7,607	4,783	6,220
British India	75,326	62,909	102,520
Australia	50,719	44,769	56,650

Total 158,717 150,508 231,846

The increase in the colonial consumption of our railway material in the first eight months of this year will be seen to have been very substantial, and it is satisfactory to note that it has been well nigh universal.

There is one circumstance which can scarcely fail to give increased animation to the Canadian demand. We refer to the vigour which is being impressed on the construction of the Canadian Pacific Railway. This great work has been a long while in hand, and at one time it appeared probable that the Canadian Government would back out of the scheme altogether on the ground that it involved financial responsibilities beyond the strength of the Dominion. But Sir JOHN A. MACDONALD, the distinguished Canadian statesman, has now taken the matter in hand in earnest. His far-seeing mind has become impressed with the conviction that the Canadian Pacific Railway will open up the North-West Territory, and convert the Dominion into one of the great powers of the world. Whether this result will really be witnessed we will not undertake to say. It is possible that a severe climate will render it impossible for Canada to ever attain anything like the vigour which has been acquired by the United States. This is probably the opinion of the outer world, although Canadians appear to think otherwise. But one result will, at any rate, be witnessed, and that is a considerable consumption of rails and general railway material for this Canadian Pacific Railway for the next six or seven years. In endeavouring to secure orders for rails, &c., for the Canadian Pacific, our ironmasters may possibly have to contend with American competition. It behoves them, then, to abstain from exorbitant demands or anything approaching to them, and to be content with reasonable profits, more especially as they will be working for a good paymaster.

## THE MINING INDUSTRIES OF LEICESTERSHIRE.

One of the most interesting of our mineral fields is that of Leicestershire. At one time lead ore was worked in it, as well as blue lias, but the minerals now raised are coal, ironstone, slate, freestone, fire and other clay. In the neighbourhood of Charnwood Forest, which is treeless, and consists of about 15,000 acres, yields coarse slate for roofing and other purposes. Gypsum has been quarried near Leicester, and limestone, which makes excellent cement, at Barrow-upon-Soar. The coal field is comparatively a small one, yet it is valuable, there being a good deal of coal under newer formations than the seams now being worked, and which underlie the new red sandstone. On the northern side it is bounded by the old slates and porphyries of Charnwood Forest, which form a miniature mountain range, and lies south of the valley of the Trent. The field has been generally divided into three districts—Moira, Ashby-de-la-Zouch, and Coleorton. At Ashby there are the lower coal measures, without any workable seams, there being faults on both sides downcast, which bring up the workable beds of Coleorton and Moira. The main coal of Moira is from 12 to 14 ft. in thickness, that at Coleorton from 6 to 8 ft., and in some instances, nearly 10 ft., what is known as the Heath End coal and cannot reach that thickness. At Whitwick, there is a singular sheet of dolomite, locally known as whinstone, lying between the coal measures and the new red sandstone, being composed of trilobite fossils, angite titanite-ferrite, and olivine. At one of the shafts of the Whitwick Colliery it is 60 ft. thick, and turned to cinder a seam of coal it came in contact with. The probability is that it was turned out as a sheet of lava over the denuded surface of the coal measures anterior to the formation of the trias. In the same locality there are rock-faults, the main coal having been extensively invaded by channels filled up with fine sand, which entirely replaced the coal for some distance, and one of these banks was found to be 80 ft. in width, and was formed of the same stone that formed the roof of the coal. These singularities are similar to those that have been met with in the Forest of Dean coalfield. At some of the pits in the Moira district clear salt-water, of about the same quality as ordinary sea-water, has been met with in considerable quantities and utilised, being considered beneficial in scrofulous and rheumatic affections.

In 1855 there were 11 collieries in Leicestershire, the output from which was 425,000 tons. In 1869 there were 10 collieries that yielded 650,700 tons, and in 1879 the produce of 28 collieries was 1,103,294 tons, so that the increase in 24 years has been nearly equal to 130 per cent. The area of the coal field is 15 square miles, the number of workable coal seams from 2 feet up to 10 feet in thickness 10, with a thickness of coal from 40 to 45 feet, giving a total of 339,574,841 tons. But in the concealed coal fields it is calculated that in the Moira district there are under the Permian 15 square miles of coal, and under the New Red Sandstone in the Coleorton district from 25 to 28 miles of coal that will yield 1,790,000,000 tons of coal. The Leicestershire field is most advantageously situated for doing a large trade with the metropolis in coal, but it does not appear to have been cultivated to the extent that might have been expected, for barely 5000 tons a month is sent within the radius of the city dues from the collieries in the county. Netherseal sends the heaviest tonnage, but last month that colliery was only credited with 900 tons, and Whitwick 800 tons. Ironstone is only raised to a very moderate extent, no doubt owing to there being no furnaces in the county, and as it is principally found in connection with the coal measures it would scarcely pay to send it to the furnaces in the adjoining county of Derby, as the ironmasters there prefer the Northamptonshire stone before their own. What is raised, as well as nearly all the coal, passes over the Midland Railway.

A considerable tonnage of fire-clay is raised from several of the coal mines, and for this there appears to be markets open, the Mount Pleasant Pit turning out about the heaviest tonnage. Limestone has been worked at Bredon as well as at Barrow-upon-Soar, for cement principally and for building purposes, but a much larger quantity could be raised were it required, whilst at one time it was said that large deposits of ironstone had been met with, of which there are indications in several localities. The getting of ironstone in large quantities would most likely lead to the establishing of ironworks, seeing that there are all the requirements for smelting. Gypsum has been

quarried near to Leicester, and in other parts of the county there is good building and ordinary freestone, whilst there is plenty of slate as well. It will be seen that Leicestershire is fairly off for minerals, although they are not worked to such an extent as might be expected. The coal, however, at the present rate of raising would last for many hundreds of years, more especially if that under the permeable and other overlying formations is taken into consideration. The resources of the county will, therefore, be available when those in many other districts will be exhausted. In conclusion it may be stated that the coal mines of Leicestershire are amongst the oldest we have, for the seams were worked at a period when the use of iron must have been unknown to the miners, for implements which appear to have belonged to a very early period are said to have been found in some old coal workings near to Ashby-de-la-Zouch, consisting of stone hammer-heads, wedges of flint, as well as wheels of solid wood, although there is plenty of ironstone in connection with the coal measures.

## THE COPPER TRADE.

During the quarter ending Sept. 30, 1880, the quantity of copper ore, the produce of Cornwall and Devonshire, sold at the Cornish Ticketing, was 10,433 tons, which contained 705 tons 17 cwt. of fine copper, and realised 37,505L 17s., being equal to an average of 3L 10s. per ton of ore, and 51L 14s. 4d. per ton of copper in the ore. During the same period the British, colonial, and foreign ores sold at Swansea amounted to 7976 tons, which contained 674 tons 2 cwt. of fine copper, and realised 37,549L 16s., being equal to an average of 4L 14s. per ton of ore, and 55L 14s. 1d. per ton of copper in the ore. The average produce of the ore sold at the Cornwall Ticketings was 63 per cent., whilst that sold at Swansea gave an average produce of 8 7-16 per cent. From this it will be seen that the aggregate sales by ticket were 18,409 tons of ore, containing 1379 tons 19 cwt. of fine copper, and realising 75,055L 13s. The subjoined is a summary of the periodical sales at the Cornwall and Swansea Ticketings respectively. The ores sold at the Cornish Ticketings were—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.
July 1.	£89 11	0	7½	£3 19	0	10s. 7d.	889 ... 66t. 13c.
" 22.	92 12	0	6½	3 12	6	6 ½	2,168 ... 149 2
Aug. 5.	92 18	0	6½	3 11	0	10 5½	1,124 ... 76 3
" 19.	96	8	0	8 ½	3 5	0	10 5½
Sept. 2.	92 13	0	7½	3 16	0	10 9	1,052 ... 74 7
" 23.	90 5	0	6½	3 6	8	9 10	3,092 ... 208 10

Total for the quarter 10,433 ... 705 17 ... £36,505 17 0

Quarter ending June, 1880 9,936 ... 689 13 ... 37,566 18 0

Quarter ending March, 1880 9,768 ... 662 2 ... 40,413 9 0

Quarter ending December, 1879 10,586 ... 715 6 ... 42,147 14 0

Total for the year 40,723 ... 2772 18 ... £156,533 18 0

Showing a quarterly average of 10,181 ... 693 4 ... 39,158 14 6

Corresponding quarter Sept., 1879 10,235 ... 710 7 ... 32,774 3 0

The ores sold at the Swansea Ticketings were—

Date.	Standard.	Prod.	Price.	Per unit.	Tons.	Fine cop.	Amount.




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As to the system of inspection not satisfying the country, does any one think that the country would stand the alternative system as it is in Prussia, where there are five inspection centres, and in one of them (at Bonn) there are seven chief officials in the town, and twenty-six inspectors scattered over the district? Does this lessen the death rate? Mr. BAKEWELL is misinformed when he says that inspectors do not intimate the presence of causes of danger beforehand. Take this district. On one occasion lately it was due to forewarning that many persons were not burnt. Finding that about twenty men were not withdrawn from the drift when shots were being fired, and considering that there was danger, the inspectors sent a written order to the effect that this should be done. Soon after the order was given a blown-out shot caused an explosion. The two shot firers were burnt, and one of them died; the other men were just beyond the reach of the blast. On another occasion a complaint as to the dangerous state of the mine by the inspectors, and a written order to remove the danger, was followed by a fatal explosion through inattention to the order. One of our greatest explosions was owing to a verbal request from an inspector being ignored. I might bring forward many more instances to show that inspectors are not always wise only after an accident has happened, and that though the investigation of the causes of accidents forms part of their duties they are not confined to it. According to returns recently published it appears that in proportion to the minerals raised and the number of men employed the death rate in American mines is much greater than in those of England. This is I believe the result of our Mines Regulation Act and our most practical system of inspection. In Prussia, notwithstanding all its advantages, the system of inspection (if it can be called so) is bad. A discussion extending over two hours took place with regard to what was deemed the impracticability of carrying out some of the clauses of the Mines Regulation Act, and the necessity of a modification of the same as a matter of fairness to managers. The discussion was again adjourned.

## THE EUREKA (NEVADA) SILVER MINING COMPANY.

The Eureka District, Nevada, is to-day represented in our advertising columns in the inauguration of a company which takes its title from the district. The Eureka (Nevada) Silver Mining Company (Limited) is formed to work a series of mines hitherto developed by private enterprise, and known as the Williamsburg Group. A shaft has been sunk 100 ft. deeper than any previous workings, and a valuable ore body cut into. Hoisting machinery and appliances of the most approved kind will be erected by the company now in course of formation; and in addition to these mines there has been acquired the Bald Eagle series, contiguous to the Dunderberg Mine of the Ruby and Dunderberg Co. Very rich ore has been raised, and the report of Captain Richard is of a highly satisfactory character. He says:

I have always been favourably impressed with the value of this ground, and have no doubt that it will become a valuable property, provided it is systematically explored. The country rock surrounding the ore body in this property is precisely the same as found in the mines of Ruby Hill, and the character of the ore is identical with that found in the Richmont and Eureka Consolidated mines. Everything points to the probability of large ore bodies existing within the boundaries of the Bald Eagle series of claims, and I have no hesitation in recommending it as one of the best mining prospects in the district.

Captain Rickard endorses Mr. Prideaux's report on the Williamsburg mines. The capital of the company is only 100,000*l.*, which, after payment for both properties, leaves an available working capital of 35,000*l.* It would be difficult to find a more legitimate mining enterprise, and the formation of the company would appear to be based on sound commercial principles. It is an important feature that the working of these properties is under the control of a strong company, whose directors are representative and practical men. It may, therefore, be confidently expected that the operations of this company will very largely enhance the already world-wide reputation of the Eureka (Nevada) District.

## REPORT FROM CORNWALL.

Oct. 7.—The advances in the tin standards at the end of last week had a very encouraging effect upon the condition of the share market, and once more stimulated speculation into activity. Those who have held to the belief—in spite of all fluctuations and apparent reverses—that the autumn was likely to see a substantial recovery in the value of metals have now more food for their hopes and expectations, nor do we think they are likely to be disappointed, only we cannot expect that the course will be quite smooth. There are many adverse interests not to ensure some checks, though, after all, they will matter little to the well advised; and, even as matters are, we have had a very decided gain. Perhaps Mr. Boyns' prediction will be realised this Christmas after all, and tin once more touch 70*t.*

The calculation has been made that up to Michaelmas the total dividends paid for the present year by 11 Cornish and two Devonshire dividend mines has reached 105,000*l.*, with every prospect of that amount being increased to at least 130,000*l.* by the end of the year. It is years since, in these uncertain times, that mining, judged by this very practical test, has presented anything like so productive an appearance, for these figures indicate not only a very large advance in divisible profits, but an actual increase of dividend mines. Nor is this all. As we have previously pointed out, there is a very large proportion of our mines which are neither to be found on the dividend nor on the calling lists, and the result of the improvement we have enjoyed, partial and fluctuating as it has been, has been their increase, which shows an additional comparative profit in the saving of expenditure on fresh capital. Without pretending to any close exactitude, we believe the calls made during the present year, so far as they arise out of the year's operations, do not greatly, if at all, exceed 30,000*l.* The actual total is, indeed, nearer 40,000*l.*, but then this was caused to a large extent by debit balances carried over; and we believe it will be found on examination that these debit balances since the beginning of the year have in the aggregate been greatly reduced. We do not include in our calculation of the calls the capital called up on new ventures which have yet to be proved; but the very fact that there are so many of these with hardly any stoppages to set off on the other side is of itself a very clear indication of the improvement which has taken place.

Deducting the calls from the dividends we take it then that up to the present date there has been a net current profit on our mining operations in Cornwall and Devon for 1880 of something like 75,000*l.* It is not very easy to say the amount of capital on which this sum has been declared, in face of the fluctuations of the share market, for what is true to the letter to-day is hardly likely to be true to-morrow, but still some approximation made be made, and we take it that we shall be substantially accurate, at any rate quite near enough for our present purpose, if we put it at something like 200,000*l.*—that is at current prices, which would make, taking into account also the reduction of debit balances, a return all round of some like 5 per cent., or over 6 per cent. if the dues are also reckoned. This shows very forcibly the vitality inherent in western mining, and compares but ill with other classes of investments—railways to wit.

After all when one comes to examine the "amended" report of the Committee on Explosives one is very much impressed with the idea that the objections raised to the draft were very like a storm in a teacup, they are really so trivial and so little affect the general conclusions arrived at. Thus in summarising the result of the experiments at Seacock, where the draft stated the "strong" explosives were "not to be recommended" for a dry end, and in pretty solid ground, if not extremely hard, the report now states that these "strong" explosives under such conditions "did not recommend themselves"—a distinction with very little difference. The statement that "a majority of the experience are that dynamite is the most dangerous as well as the most injurious of all the explosives in use," &c., is omitted, and this is the most important enunciation, though as the evidence concerning it is left untouched, people are quite free to draw their own conclusions. Moreover, the only new additions to the report, and the only other changes that are worth noticing, are the statement that "in wet ground there is always danger of the exudation of nitroglycerine from the dynamite, therefore we think it should always be made up in water-proof cartridges for use in such ground," and the remark that "in no case should high and low explosives be placed one over the other in the same

hole." The report is certainly to some extent improved by these changes, but in all essential respects it remains precisely what it was, a very valuable contribution to our practical mining literature, and a credit to the working members of the committee who did so much work with so little money, and especially to Mr. J. H. Collins, F.G.S., the secretary.

## REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Oct. 7.—The customary dulness at the meetings of the Iron Trade previous to the Quarterly gatherings was observable in Birmingham to-day, and in Wolverhampton yesterday, to a greater degree than has been noticeable at the meetings immediately preceding the last two Quarter-days. This is not because there are not so many orders about now as there were at the earlier dates, but because there is a greater uncertainty as to what course prices are likely to take, seeing that ironworkers' wages have just been reduced 1*s.* per ton. It is generally believed that marked bars will come down 10*s.* per ton. Common bars are easier by 5*s.* than they were, but sheets, on the contrary, are rather firmer, the result of the association which certain of the makers have determined to form. Still, singles were this afternoon obtainable at 7*t.* 15*s.* per ton. Pig-iron is quiet, with a tendency to ease in price. Ormsby is selling at 50*s.* a ton delivered in this district, and Lancashire and Welsh hematites are to be had at between 3*t.* 15*s.* and 3*t.* 10*s.* As to fuel, the Cannock Chase Colliery proprietors, stimulated by the receipt of some fairly good orders, are asking more money for their coal by 6*d.* to 1*s.* per ton, but their example is not being followed by the leading firms.

On Wednesday the miners' agents in the South Staffordshire and East Worcestershire district waited upon the Earl of Dudley's agent, Mr. G. Fisher Smith, with a view to influencing him to raise the price of coal so that the colliers might receive an advance in wages. No promise was made to the miners, and it is understood that they will by-and-by again wait upon his Lordship's agent, but it is believed that Mr. Smith will advance the price of his Lordship's coal as soon as the state of the trade will allow of its being done.

The large mill and forge which was worked by Messrs. Morewood and Co. for many years at Highfields, Bradley, and which has been closed for four or five years, is this week reported to be re-started by a local firm of ironmasters. Extensive alterations and additions will be made.

At the South Staffordshire Mines Drainage Commissioners' annual meeting in Wolverhampton, on Wednesday, Mr. Walter Williams was re-elected chairman for the ensuing year. It was stated that the expenditure upon the Tipton district during the past year had been 24,000*l.*, and the receipts only 14,000*l.* There was a total debt upon this district of 54,000*l.* When the Commission was formed, in 1874, the output of minerals in South Staffordshire was 6,000,000 tons, but last year, owing to the depression in trade, the output was only 3,600,000. The report of the mining engineer, Mr. Terry, estimated the cost of carrying on the pumping operations in the Tipton district, and of executing some works already authorised, for the year ending June 30, 1881, at 19,000*l.*

By the close of Exchange hours it became known that Earl Dudley and certain other marked bar firms had just determined to at once reduce iron the required 10*s.* per ton, making round oak bars 8*t.* 2*s.* 6*d.*, and the bars of certain other marked houses 7*t.* 10*s.* Many sheet firms met again this afternoon and confirmed the prices arranged last week, namely, 7*t.* 10*s.* for singles, and so on.

## REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

Oct. 7.—Some time ago after an imaginary mining journey from Ruabon to Bala I left my readers at the White Lion Hotel of the latter town. The only excuse I can give for leaving them there so long is that they were left in comfortable quarters. If now they will resume the journey with me I will take them on to Barmouth, and describe to them the principal mine and quarry properties and undertakings that lie on either side of the way.

And, first, some ten miles to the north of Bala, on the road to Ffestiniog, at a point near which the new railway passes, were the Arunodd and Nant Ddu lead mines. There were several well defined lodes here which were productive in the hard slaty beds at the base of the Llandeilo strata, but which became barren of ore as they entered the soft Lingula shales below. There remained, however, a good depth of stoping ground above this level. Around these mines there were numerous trial openings for slates. The split, however, seemed irregular and uncertain, although the colour and grain of the stone seemed all that could be desired. Possibly the construction of the railway may lead to further and, perhaps, more successful explorations here. Between these mines and Bala several manganese mines have been opened at different times. The ore was distributed through irregular cracks and cavities in the rocks, and partly through the irregular nature of the deposits, with the absence of any well defined plan of mining, and partly through the heavy cost of carriage they have been abandoned. The construction of the railway may lead to the re-opening of these mines.

Leaving Bala and its lake behind we pass on our right a little way beyond Llanuwchllyn station a slate quarry at which operations have at various times been carried on for 100 years or thereabouts. Whether these have not been well directed, or whether there be some pyritous or other defect in the stone, the result is that the quarry lies idle more than it is worked. Probably deeper and more extensive workings would reveal a better set of slate beds. Further on our left near the summit of Aran Benlyn is another slate quarry which has never as yet gone beyond the earlier stages of development. A hard blue-coloured compact slate-rock, but possibly like those further south-west near Danas Mawddy, more fissile for slabs than slates.

We are now gaining the summit of the watershed between the tributaries of the Dee and the Mawddach, some 1100 ft. above the sea and the rocks on either side of us, greenstones and felspathic rocks of many kinds, with interstratified slates, grits, and shales are considerably mineralised, chiefly with iron pyrites and the yellow sulphide of copper. Several trials have been made in mining the latter, but so far without leading to any practically successful results. The mineral is too widely diffused; still, there may yet be discovered cracks in the slate where it has been concentrated. So we run down rapidly to Dolgelly; some 3 miles south-west of this old-fashioned town on the old road to Towyn is the Crown Slate Quarry. This is an underground quarry which has been opened in a blue-slate rock that lies between two hard felspathic ashy beds. Operations have been going on here for a number of years; a lower level has lately been driven, which has entered good slate-rock, in which chambers are now being opened. I wish the proprietors the successful result they deserve.

Passing Penmaen Pool for the present (for we shall have to return on the north side of the valley near the newly constructed bridge, a steep ravine leads up by abandoned gold mines to a long ridge or series of ridges known as Cefn Cam. From four to eight miles up this valley there is, I venture to say, the boldest and grandest rocky scenery in all Wales. There are vast terraced escarpments of the Cambrian rocks, whose lines of bedding between grey blue and purple strata are seen undulating down each side of the rocky valley until they dip under the softer outline of the Lingula Flags. Then for a stretch of a dozen miles or so there are on our left the grand escarpments of the Duffws range of mountains, with the Khinogs Fawr and Fach. All along the base of these rocks stretching northward from Cefn Cam to near Frawslynydd we walk along the summit of the Merionethshire anticlinal, the beds dipping downwards from us right and left. Here also between the hard rocks above and those below are slate beds—green, blue, and purple—corresponding to the slate beds worked in the valleys of Nantlle and Llanberis. A quarry has been opened in these beds at the Cefn Cam end, and there are several trial openings all along their course to Moel-y-Gwirth. What is wanted, however, is one well-directed trial to determine whether the slate beds are proper, as they ought to be, of sufficient thickness to pay for quarrying. I believe a movement with this result in view is in progress. From this mountainous digression we cannot do better than post back along the Trawslynydd road to the Ship or the Lion at Dolgelly and resume our journey another day.

Walking along the slate quays at Portmadoc the other day I noticed that loading for the coasting trade was still going on briskly. There were two or three vessels loading at every quay. The demand for large size Festiniog slates, 20 by 10 and upwards, is said to be greater than was ever known. The shipbuilding trade at this port is at a standstill just now. A few years ago there were eight or ten vessels on the stocks. With the approach of winter the coal trade is improving—several collieries have been reopened. The Grosvenor, near Wrexham, is again in work. Brynkinalt is said to be worked by a Liverpool Company, who raise over 300 tons per day, and employ nearly as many men. The terra-cotta trade, which Mr. J. C. Edwards—the pioneer of the Rhabon fire-brick and sanitary ware trade—is adding to his business, is progressing, and the prizes that gentleman lately offered for decorative designs for the interior of houses has brought forth some of a very satisfactory character. The chief prize, of 50*s.*, has been divided equally between Mr. L. A. Shuffrey, of St. John's Wood, and Mr. Edwin W. Poley, of Camden-road. At the new Crickheath Lead Mine, near Oswestry, the operations are of a hopeful and promising character. Discoveries of lead ore have been recently made.

## TRADE OF THE TYNE AND WEAR.

Oct. 6.—The coal trade has been well sustained during the past week most kinds of coal having been in steady request, while the demand for house coal for the London and coastwise markets improves. There are more enquiries for contracts for manufacturing and steam coals, so that the steam coal works in Northumberland are fairly employed as a rule. The coke trade in Durham continues to improve; the blast furnaces of the district take large quantities, and the quantity sent to Cumberland, North Lancashire, &c., is also considerable. More pits are likely to be reopened, but coal masters ought to be cautious about taking this course until the demand really warrants it. The price of iron and coal cannot possibly improve if the production is increased immediately an improved demand occurs.

We noticed some time ago that it was stated that during a thunderstorm lightning had entered a coal mine in North Durham, and traversed a great part of the roads and workings. This remarkable occurrence was brought before the notice of the members of the Northern Mining Institute a few weeks ago, and a committee was appointed by that body to investigate the matter. The members of this committee are Mr. C. Berkley, Mr. J. B. Simpson, Mr. W. H. Hedley, and Mr. Theo. Wood Bunning, the secretary of the Institute, and these gentlemen visited the Tanfield Moor Collieries on July 30. It appears that the top of the working shaft is 34 fathoms from the Shield-row seam; an incline bank leads north from the shaft, and ultimately reaches the day by a drift, and a little to the south is an upcast shaft. The engine-way leads south from the working shaft, and goes into a goaf; between the goaf and the working shaft are two downcast shafts. From what can be gathered, the lightning passed down the working shaft and struck the Flatt sheets, and then divided into two parts, one of which went north up the incline way, and probably passed out to the day by the drift, where it was supposed to have left marks of its exit in a bank near by; the other part went south along the engine way, but after passing a point where it was notched, its further course was not known. The hill of the seam is soft fire-clay, and the roof of strong post, both of which would offer great obstruction to the absorption of the electric fluid, and the probability was that this portion of the fluid had been dissipated in the goaf, or had forced an exit by way of the downcast shaft. The evidence taken was appended, and there is no doubt that the facts are correctly stated. The on-setter at the bottom of the shaft was struck, and received a severe shock. There was no injury done to the shaft. Mr. A. L. Steavenson remarked in the discussion of the question that a similar circumstance occurred at Page Bank Colliery about ten years ago. Professor Herschell said, that in order to produce an explosion the electric fluid must come in contact with a highly explosive mixture, and the occurrence in question showed the desirability of lightning conductors at collieries, and the subject being investigated by mining and electrical engineers.

SEAHAM COLLIERY EXPLOSION.—The work of restoring the ventilation and recovering the bodies has proceeded very slowly in the last days of last week, the difficulties met with having proved very serious, mainly owing to foul air and heavy falls of roof. On Saturday morning early a fire was again discovered in the stables, and all operations in the interior workings were suspended on this account. It was found that the fire was in the Maudlin stables, and that there were steam and smoke, and the shale red-hot. Preparations were made to extinguish the fire by means of water-pipes, &c., but after a consultation was held this was abandoned, and it was determined to seal up the workings in this seam, and this has been done by inserting stoppings in the three main drifts leading to the seam, and, of course, all further exploration is suspended until it is ascertained that the fire is extinguished, and the stoppings again removed. Pipes are inserted in the stoppings for the purpose of ascertaining the temperature, and thus it will be known when the fire is extinguished; but it is likely that some weeks will elapse before this is accomplished. On Thursday last a number of bodies were recovered, the total number now being 136; and, but for the untoward breaking out of the fire, all the bodies were expected to be got at the end of the week. Several records were found, some of them of a very touching character; and these records prove that a large number of the men lived for a long period in that dark and dismal chamber of death. One of these records, written on a piece of wood, was dated Thursday, the explosion having occurred on Wednesday, at 2:30 A.M. This notice stated that many of the men were singing hymns and praying, but that his thoughts were fixed on his wife and little boy. (This little boy was sick, and died on the day of the explosion.) The workmen are now engaged in ridding up the Hutton and main coal seams, and putting them into working order.

The Iron Trade has continued quiet on the whole. The plate trade, however, as might be expected from the exceptional brisk state of the iron shipbuilding trade is very good. The extensive ironworks at Sunderland known as the Wear Rolling Mills has been put in operation, and a large amount of work will be done there. The company is very influential, and as the partners are engaged in other branches of business ample employment will be found for these works. The output of finished iron will then be largely increased in the district, but there is ample employment at present for all engaged in the plate trade. Several very large orders for plates have been booked by leading plate mills in this district lately. On a small scale shipments of iron have been recommended to the United States, and during the next month several cargoes will be shipped from north-eastern ports, but the quantity will be far below last year, so far as pig-iron is concerned, but in excess of the manufactured iron and steel. The pig-iron trade has improved a little. The market has been stronger in accordance with the improved tone in the Scotch iron trade, but there is little advance in rates. The Scotch market is much disturbed by speculators. The shipment of pig-iron has improved towards the end of the month. There has been more desire to buy, especially warrants; 39s. 6d. for No. 3 has been the highest point touched. Connall's stores at Middlesborough are increasing.

The immense engines just completed for the new steelworks in course of erection by Bolckow, Vaughan, and Co., of Middlesborough, probably the heaviest engines of their size yet made, will attract much attention. The engines are horizontal high-pressure. The cylinders are 40 in. diameter, 5 ft stroke; the crank shaft is constructed of Bessemer steel, with bearings of 16 in. diameter fitted in adjustable gunmetal steps, with balanced wrought-iron cranks at each end carrying a central spur pinion 4½ ft. diameter, 8 in. pitch, and 20 in. wide, working into a second motion wheel of 9 ft. diameter. The total weight of the engine is close upon 200 tons.

The total shipments of pig-iron for September from Middlesborough was 78,928 tons, an increase of 7737 tons on the previous month. The foreign shipments amounted to 40,243 tons, an increase of 6165 tons. The monthly returns of the Cleveland Ironmasters' Association show that at the end of September there were 118 furnaces in blast and 48 out. Last year at this period there were only 82 in blast and 43 out. The returns are much more satisfactory, and their influence will strengthen the market. The make has been reduced considerably, although three more furnaces have been at

work. The stocks have only increased by 10,234 tons, and this is a cheering symptom.

The railway accommodation between this locality and Liverpool is not considered satisfactory by the commercial classes, and the rates charged by the North-Eastern Railway Company are also objected to. There has been a feeling of this kind for a long period, but it has not been expressed in public until lately. At Sunderland it is proposed to bring the Midland Railway system into that town if it can be accomplished, and a more direct route between Newcastle and Liverpool is also strongly advocated in this district, as well as a direct line from Newcastle to Glasgow.

## SOUND INVESTMENTS.

**GRAND TRUNK RAILWAY OF CANADA.**—The reaction in the securities of this railway during the past month has been one of the most remarkable features of the whole market when the intrinsic merits of the property are considered. The aggregate of increased receipts for the fourteen weeks of the current half year amount to no less a sum than 111,729L, and this fact alone, without regard to the many other favourable features now discernible, should rather have caused an improvement in capital value. Those who have been induced to sell cannot possibly have realized what the real progress of this railway has been. On the day of the last meeting in April, the Ordinary Stock was quoted at 25, and the Third Preference 16. No one then dared to dream of such a rapid and uninterrupted development as has since taken place. In the interval of 24 weeks which have elapsed, the gross addition to the earnings has amounted to the enormous total of 187,213L. The Grand Trunk has since been admitted to the Chicago Pool, the directors have been enabled to successfully float 1,000,000L Debenture Stock to redeem prior charges, by which a net saving of 14,000L a year will be effected, the full half year's dividend has been paid on the First Preferences, and an interim distribution at the rate of 3 per cent. per annum announced on the Second Preferences, and yet the Third Preference is now about 6 per cent., and the Ordinary 5 per cent., lower than in April.

The recent fall in quotations is wholly attributable to adverse speculation. It would appear that there are some who cannot or will not understand that the position of the Grand Trunk to-day is very different from what it was a few years ago, and who have sold large amounts of stock which they do not possess, in the hope of buying back at lower prices to secure profits. In order to assist their operations they have carefully ignored every favourable feature and circulated a variety of the wildest and most extravagant rumours, for not one of which has there been a shadow of foundation.

Upon the important question of "rates," the Grand Trunk was never in so strong a position, as the "Pool" Commissioners are rigidly enforcing a strict observance of the agreed tariffs. The Grand Trunk and Chicago line has only just been admitted within the city; hitherto, the Grand Trunk has not derived anything like the full benefit of this valuable feeder which will now accrue to it.

Shareholders may, I think, look forward with the greatest confidence to the meeting to be held on the 28th inst., and if in the meantime the weekly receipts should show occasional fluctuations they may rest assured that on the closing of the navigation in November, extraordinary results will be manifested. All the securities of this railway at the present reduced quotations are well worth buying.

**LONDON, CHATHAM, AND DOVER.**—It must be satisfactory to the shareholders to remark the continued steady development of this railway, the increase in the traffic receipts for the fourteen weeks of the current half year to the 3rd instant amounting to 20,277L. During the same period the additional earnings of the South Eastern Railway, with double the mileage, only amount to 12,314L. At the time of the proposed fusion of the two companies, the advocates of that measure of spoliation to the Chatham and Dover line estimated the relative progress of the two companies as 69 in the South Eastern, as compared with 31 in the Chatham. As a matter of fact the result has been reversed.

**GREAT EASTERN AND NORTH STAFFORDSHIRE RAILWAYS.**—The traffic receipts of both these railways continue to exhibit decided vitality, and Ordinary Stocks of each undertaking are unquestionably good and improving investments.

**GREAT WESTERN RAILWAY.**—Immediately following the issue of my circular last month, in which I recommended investments in this stock, a steady rise ensued, the quotations advancing from 127½ to 131. The subsequent reaction has been wholly attributable to sympathy with surrounding markets, and not to any adverse feature affecting the intrinsic value of the property; on the contrary, the weekly growth of the receipts has been considerable. It may be interesting to investors to point out the relatively small amount of the Ordinary Stock in proportion to the whole capital of this railway, as compared with the other leading lines in the United Kingdom. Thus, the proportion is 41·19 per cent. in the case of the Lancashire and Yorkshire; 37·68 London and South-Western; 36·87 South Eastern; 36·31 North-Eastern; 32·79 London and North-Western; 30·71 Midland; 30·66 Great Northern; 30·55 Brighton, while it is only 23·11 in the Great Western. It is therefore clear that it requires a much smaller ratio of increased receipts to pay an extra 1 per cent. of dividend on the Ordinary Stock of the Great Western than in any other of the above-mentioned railways. Quite apart from the intrinsic merits of this stock, it is additionally attractive just now, as there are reasonable grounds for anticipating its being sub-divided into preferred and deferred. Should this be carried out a very great advance would no doubt take place.

**ISLE OF MAN RAILWAY.**—The shares of this company are but little known in the market, but they deserve more attention than they have hitherto received. They are 5½ fully paid, and can be bought at a small premium. The dividend for the present year will, I expect, be 5 per cent., although the line has not reached anything like its full development. In my next circular I propose to enter more fully into the merits of the undertaking. This railway is perfectly safe from all competition.

**MEXICAN RAILWAY.**—The announcement that it is the intention of the new President of Mexico to seriously take into consideration the public debt, with a view to revive Mexican credit abroad, is a welcome sign of the improved condition of the country. Concurrently with this cheering declaration a strangely inconsistent rumour has been very industriously circulated to the effect that the President contemplated inaugurating his new régime by nothing more nor less than an act of spoliation, viz., the withdrawal of the subvention to the Mexican Railway Company. It seems impossible to believe that he should voluntarily stultify himself by committing such a gross injustice while professing at the same time a desire for re-establishing the credit of the country; and any proposal to the bondholders which included the diversion of this railway subvention from its rightful owners would be fatal to the settlement of the debt, as it would only demonstrate the unreliable nature of the engagements of the Mexican Government. One looks in vain for any official confirmation of this report, and no doubt it will prove to be only another canard which has been concocted to serve the purpose of adverse speculators in the securities of this railway.

**ATLANTIC, MISSISSIPPI, AND OHIO.**—Holders of these bonds should at once apply to the agents for the receivers' report to 30th June last, which has just been published. It will well repay careful perusal, as it contains a vast amount of information demonstrating the rapidly-growing prosperity of the railway. Nothing can be more hopeful than the following extract:—"For the past year the net revenue realized was more than sufficient by the sum of 192,133 dols. [or 38,433L.] for the payment of full interest" on the Divisional and 7 per cent. Bonds. It further appears that on the 30th June there remained in the hands of the receivers no less a sum than 411,946 dols. [or 82,389L.] as excess of resources over liabilities, and this after paying off 84,190 dols. [or 16,838L.] Virginia and Tennessee Registered Certificates *out of revenue*. This surplus of 411,946 dols. must of course have been further augmented during the past three months, so that it is reasonable to assume that the receivers at the present moment are absolutely in the position to pay from 8 to 10 per cent. to the certificate-holders on account of overdue coupons. It is surprising, therefore, in the face of the above official statement that the full interest is now being earned, the Seven per

cent. Certificates are quoted at only 103, the more especially when it is remembered that this price includes no less than 39 per cent. of overdue coupons which will be dealt with immediately. Sooner or later a great improvement in value must take place when the merits of the security are clearly understood.

**PHILADELPHIA AND READING RAILWAY.**—Since the issue of the committee's report considerable diversity of opinion has been expressed as to the position and prospects of this railway. No one can deny that this is a great property, though it has been grossly mismanaged in the past; but under the present more enlightened administration, and aided by the enormous growth of the traffic receipts, there seems every prospect of a successful future, and whether the floating liabilities are discharged by means of an assessment on the ordinary shares (as in the case of the Erie), or by the issue of a deferred stock, there can be no doubt that benefit must accrue to the ordinary shareholders, and I am decidedly of opinion that they will act wisely in firmly retaining their holdings.

**TRAMWAYS.**—The market for these securities has latterly shown some symptoms of revival, owing to the steadily increasing traffic returns and the probability of the working expenses showing a large decrease, due to the low price of provender. The following tramway securities can now be bought to yield 5 to 6 per cent. to present investors, with steadily improving prospects (the current quotations include three months of accrued dividend), viz.:—Argentine, Barcelona, Birkenhead Preference, Bordeaux, Provincial, Tramways of France, Tramways of Germany, Tramways Union, and Wolverhampton. Tramways and general works can be bought to pay 7 per cent.

**BORDEAUX TRAMWAYS AND OMNIBUS.**—There are now 24 miles of this tramway system finished, but only about 16 are yet opened for traffic. The weekly receipts since the 1st of July amount to the handsome total of 22,858L, or an average of 175L per week. It is expected that the remaining 14 miles will be completed before the close of the year. These shares at 10½ are very cheap.

**TRAMWAYS COMPANY OF GERMANY.**—During the past month the meeting of this company has been held, when it was pointed out that, although only 6 per cent. dividend was distributed, the directors really could have paid 7½ per cent. If the position of this security were properly understood, the shares would, I think, be quoted at 12L instead of 10L, at which they are now selling.

**IMPERIAL TRAMWAYS.**—The directors have decided, and wisely so, I think, to issue £35,000 of six per cent. Preference Shares, for the purpose of extending and more thoroughly equipping the various systems. Having perfect confidence in the Board, I have no doubt this money will be expended so as to produce the largest possible amount of benefit. These Preference Shares must prove a steady six per cent. investment. As some misapprehension exists as to the general principle of extensions, it may be well to point out that the general improvement in the position of the Sunderland and Birkenhead companies dates from the time when additions to their respective lines were opened out. I look for similar results in Belfast.

**CITY OF LONDON REAL PROPERTY.**—Since I first recommended these shares for investment in 1875, there has been a continuous rise in value from 9L 10s. to the present value of 16L per share, and the dividends meanwhile have been 7 per cent. per annum. As its name implies, the property of this company is of the very highest class, and the management is altogether unexceptional. The new shares recently issued to provide the capital for the purchase of further properties, are now quoted at a small premium. They enjoy a guarantee of 6 per cent. for seven years.

**CANADIAN COPPER.**—It would appear by the recently published advices that the works upon the several mines are now being pushed on vigorously, so that the shareholders may reasonably look for some practical demonstration of the value of their property at an early date. The 4L fully paid-up shares can at present be bought at 1L 15s. per share, and they are likely to advance considerably upon any further favourable reports being received. The principal market for these shares is in Glasgow.

**NEUCHATEL ASPIALTE.**—The business of this company is increasing. The Preference shares at 1L 12s. 6d. and the Ordinary at about 9s. are well worth buying, both being fully paid up and limited.

**JOINT-STOCK BANKS.**—The great rise in the value of the shares of the London and Westminster and the London and County Banks, since they were registered as "Limited," is a convincing proof of the beneficial nature of that change in their constitution. It must be a matter for regret to the shareholders of the Union and London Joint Stock that they have not adopted the same policy, as no doubt a similar advance in the value of their property would also have ensued.

**INDIAN GOLD MINES.**—Enormous transactions in the shares of the three leading Indian Gold Mining Companies have taken place during the past month, and the buying has been of a very influential character. Public interest has been principally directed to the shares of the Devala Moyar Company in consequence of the great importance attached to the official statements of Mr. Brough Smyth, the late engineer to the Indian Government, who is now associated with this particular undertaking. The 1L fully paid shares are now quoted at 2½, and there seems to be ample justification for this advance. While the Devala shares command this improved price, it is surprising that those of the South Indian and Indian Glenrock Companies, which were the earliest in the field, and therefore should be first to commence actual mining operations, should remain at such low prices as 1L 15s. and 1L 10s. respectively. The comparison is the more remarkable when it is remembered that some few months since, in the very earliest days of these pioneer companies, the South Indian shares were at 3L and the Glenrock at 2L 5s. Now that the two companies are on the eve of commencing absolute work (the machinery being on its way to India), the shares should, at any rate, be at the old level, if not higher.

—From Mr. WILLIAM ABBOTT'S Circular for October, 10, Tokenhouse Yard, London, E.C.

## WATSON BROTHERS' MINING CIRCULAR.

**WATSON BROTHERS, MINEOWNERS, STOCK AND SHARE DEALERS, &c.**  
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

"A Shareholder" in Morfa Du—if he who uses that signature in the Journal is really a shareholder—is quite right when he says the directors are too old-fashioned in their ways to meet the views of certain dealers in bluestone. But he is not quite right when he says "it is not business to stick up for a nominal price per ton *against a mere speculative price*." The directors had an offer for all the stuff they had, and all they could raise for a year or two, but they had no particular reason to blazon abroad a large sale of stuff at a price which looked big, but would not stand analysis: and they refused it. A thousand or two tons at 2L 10s. to 3L per ton, for instance, looks well, but let us look at it in the light of an analytical sale. There is 12s. 6d. carriage and freight to a foreign port; when there it has to be assayed by the buyer, and come up to a certain standard for lead, blonde, and silver. For any falling off in percentage of either, deductions have to be made from the price. But this is not the worst part of it. Spelter at 20L was to be taken as the basis—and for every fall of 1L in spelter 6s. per ton was to be deducted from the price of the bluestone. Let us now see how this would have worked, even supposing the percentage to be right; the price for arguments sake at certain percentages of blonde and lead would come to 2L 10s. per ton. The cost and freight to a foreign port was 12s. 6d. per ton, leaving 1L 17s. 6d. per ton. But spelter dropped to 17L, so that 18s. per ton would have to be further deducted, leaving the price 19s. 6d., which a further decline in spelter might rub off, and cause the bluestone to be delivered under contract at a positive and serious loss. And thus if the directors of Morfa Du see their way to sell their stuff at more than *double* the price they would have got under the sliding scale analysis, their old-fashioned ideas should rather be commended by the shareholders.

We may state, in fact, that one or two cargoes have lately been

old at a much higher price, and the directors fully expect to sell all they can raise.

At Carnarvon Copper the ground in the 90 fm. level is changing, and copper ore coming in. This level is driving from the new shaft to unwater the old workings, which down to the 80 yielded such large quantities of ore. In the bottom of the 80 a sump was sunk in a lode worth 4 to 6 tons per fathom, and this will soon be unwatered and rendered available.

It was calculated that 40 fathoms would have to be driven to cut the Polrose lode at the 90, and this has now been driven 31 fathoms, and is in easy ground. Down to the 50 the lode yielded 11,000L worth of tin, and has not been cut below that level. Should the lode be cut good—as we expect—there would, of course, be a run for the shares, which are good to buy for a speculation at present prices.

The water will be out of the Prince of Wales to the 99 this week. Some rich stones of tin have been broken from the Good Luck lode since our last. These are good to buy.

The No. 6 end at D'Eresby Mountain will be under the point at No. 5 in a day or two, when a rise will be put up towards the sump, which was sunk in a rich course of lead. The communication may be made in less than three weeks, and breaking good lead commenced. The men now working at the No. 6 end will then be put to cut through the great lode 18 ft., and if it proves as rich as the first blast of 2 ft. showed it to be there is no telling how high shares may go. The quotation referred to by our correspondent is a mere nominal one, and we question if any could be got on the market at double the price. Soon after the lode was first met with at the great stop at No. 4 we ourselves gave 50L per share for ten shares, and they ought now that the lode has been proved at great expense more than 20 fms. deeper to be worth much more, and now is the time to buy.

We are disappointed but not yet disheartened at the 90 cross-cut south at Parys. The agent will probably be at the meeting to explain matters. Financially the company is in a good position, and some day the expected discovery will be made, and all parties satisfied.

We may be prejudiced, perhaps we are, but we really cannot see anything in Mr. Brough Smyth's report of the Indian gold mines to *justify the millions sterling* that they have already cost the public. Many of those persons who originally applied for shares did so under the impression that there was very little speculation in the matter, and that gold in marvellous quantities could at once be obtained. But what says Mr. Smyth, "The soils of South-East Wynand have been worked by the natives *over and over again* with their imperfect appliances for thousands of years." Again, "he would point out that all the rich quartz in India had *already been taken away* by natives miners, who had sometimes gone to the depth of 100 feet." In these two facts lie the whole importance of his report, yet we are told shares went up upon it.

Australian gold mining was a very losing affair for Londoners. In 1852 there were six companies formed for quartz mining in Australia, representing a capital of 1,285,000L, and all failed but Port Phillip. The "Colonial" rose at one time to 500,000L.

At West Crebor the Wheal Crebor lode is most promising, and a shaft will at once be sunk on its course.

The 90 cross-cut south at Parys has been driven altogether 216 fms., and has passed through several good lodes that may pay to work, but the main deposit is supposed to be ahead. Of late the end has changed to shale, in which stratum good bunches of copper were found in the open cast above. The 90 cast is now within 3 fms. of Colonel's shaft, which is being sunk and will be holed through to the 90 in about a month, when good ventilation will be obtained, and operations at this important part of the mine greatly facilitated. East of Owen's shaft a good run of ore ground was worked away above the 80 on the south branch course, and a cross-cut at the 90 has been started to get under it. The present return of copper ore from the stopes is about 100 tons per month, which could be more than doubled if the price of copper should rise.

The Lisburne mines, under the management of Messrs. J. Taylor and Sons, made a profit in the year ending June 30 last of 2719L 1s. 8d., out of which a dividend of 6L per share (400L) has been declared, leaving 319L 1s. 8d. This company sold the Frongoch Mine for 5000L, and the Graigoch for 1000L, and out of the proceeds are judiciously expending money on new works at Lisburne.

Wheal Crebor has sampled 550 tons of ore. The produce is as follows:—96 tons 6½, 94 tons 6½, 93 tons 7½, 92 tons 7½, 90 tons 7½, 85 tons 7 per cent., and we hope to see it realise over 2000L.

A calculation has been made and published that the rise in value, with the dividends paid, on 34 Devon and Cornwall mines in 12 months, is equal to 1,054,699L. In this list the rise in Crebor is put down at 3000L only, but from the beginning of 1879, when we distributed the shares at 2s. each, the rise in 12 months to 12L per share gave an advance in that mine alone of over 70,000L.

At Morfa Du, in addition to the blue stone, it will be seen from this week's report that the end driving by the white rock is producing good stones of copper ore. There has always been an impression in the neighbourhood of the mine that under this huge white rock another deposit of copper ore like that in the great open cast at Parys would be found. A similar rock was over the opencast.

The stock and railway markets have again been very flat all the week, the chief fluctuations being in English railways, Brighton Deferred stock being exceptionally depressed on various rumours more or less authentic. The traffic returns were satisfactory, all showing good increases. North Eastern, 13,690L; Great Western, 4090L; Great Eastern, 5097L; London and North-Western, 2591L. Political considerations, however, outweigh all others, and so long as the present uncertainty with regard to affairs in the East continues we must expect bad markets and little or no business. Foreign stocks have shared the general depression, but not to the same extent. Mexican shares have had a considerable rise, owing to large speculative purchases on the strength of rumours that arrangements are being made for payment of interest on the bonds. We should be sorry to place much reliance on these rumours. The English funds are firmer for the week.

## COPPER AND TIN TRADE.

Messrs. HENRY R. MERTON and Co. (Leadenhall-street, Oct. 1) issue the following Statistics of Copper:

Stocks in Europe:	1,724
Chili ores and regulus, Liverpool and Swansea (equal to fine). Tons	21,940
Chili bars in Liverpool	9,910
Chili bars in Swansea	9,910
Chili ingots in Liverpool and Swansea	10
Foreign copper (chiefly Australian) in London	5,751
Foreign copper	615
Chili bars and Ingots and "barilla" in Havre	4,997
Other copper in Havre	1,125
Stocks of copper contained in other foreign ore and Spanish Pre-cipitate (fine)	

Imports and exports, January to August (eight months), were, by Board of Trade Returns:-	1880.	1879.	1878.
Imports.	1880.	1879.	1878.
Ore	66,122	63,294	65,414
Regulus	31,076	29,755	22,185
Copper	25,397	32,319	27,023
Exports.			
Foreign raw	10,475	11,301	7,817
English raw	8,998	11,143	13,173
Manufactured, including yellow metal and brass	22,053	21,951	17,947

Messrs. FRENCH and SMITH write:—Early in the past month holders of tin were disengaged by the large shipments from Australia, and sales being pressed prices fell rapidly from 84/- to 78/- lbs. From this point there was a rally, and as it became evident that deliveries would be large and shipments moderate a lively market ensued, touching 85/- From this there was a reaction, closing to-day at 83/-

Foreign in London	Tons 7,012	9,408	9,999
Banca in Holland	1,660	1,827	1,661
Billiton in Holland	2,124	2,319	1,675
Afloat for England, Straits, advised by mail and wire	200	210	200
Afloat Australian ditto	1,635	1,400	1,950
Afloat Billiton	1,090	950	812
Banca in Dutch Trading Co.'s hands	1,573	1,347	977
Banca afloat by sailing vessels	116	520	130
Total	15,410	17,981	17,404

Messrs. HENRY ROGERS, Sons, and Co. (London, Oct. 8) write:—Copper changed in value but little during September. The home trade was well occupied, and so far as can be ascertained the unwieldy stock of copper that has been so long the source of depression in this market will, by degrees, be much reduced. The West Coast charters show a falling off of 3000 tons in the nine months. The Australian supplies are not large. An increased Indian demand is looked for consequent on the higher prices obtained for all descriptions of Indian produce.

Messrs. FRY, JAMES, and Co. (London, Oct. 7) remark:—Copper has varied but slightly since our last. There was a little rally in Chilian ten days ago, which was not maintained, and that kind has been easier to buy by from 5s. to 10s. a ton; other descriptions are without quotable change.—Iron continues quiet for manufactured descriptions, but Scotch pig, after having advanced 1s. to 1s. 6d. per ton, has returned to the quotations of a week ago.—Tin: Immediately after our last a rapid recovery set in, and up to 85/- cash was paid for fine foreign on the 4th, meaning a rise of 6d. per ton in a fortnight, but in the last few days a fall of 2d. a ton has taken place.—Lead continues quiet, and prices are a trifle easier.—SPELTER also is quiet.—TIN-PLATES are about 6d. per box lower.

BRAZILIAN GOLD MINES.—The directors have received advices from their superintendent at the mines informing them that preliminary work has been commenced in the Jacutinga mines, and also at Matta Matta, Descoberto, and Serviço Velho. The superintendent adds that it is as yet too early to report progress. Various surface works were in hand and preparations being made for accommodating labourers.

RAILWAY EXTENSION IN THE NORTH.—The directors of the London and North-Western and Lancashire and Yorkshire Railway (the lessees of the North Union Railway) have resolved to erect a fine hotel in connection with the Preston new station, the largest passenger depot that is not a terminus in Europe. The tender of Messrs. Nield and Co., Manchester, has been accepted. Major-General Hutchinson, who has just completed his inspection for the second time of the railway extension between Euston and Preston, states that he will report favourably. The New West Lancashire Railway is progressing rapidly.

HOLLOWAY'S PILLS—LIVER, LUNGS, AND KIDNEYS.—A large number of internal maladies arise from obstructions over the removal of which these celebrated pills exercise the most perfect control. A course of them is strongly recommended as a remedy for almost all chronic affections—as liver complaint, congestion of the lungs, torpidity of the kidneys, and other functional disorders which cause much present suffering, and if neglected lay the foundation of innumerable diseases. Holloway's pills are especially adapted for the young and delicate: their gentle and purifying action places them above all other medicines. In indigestion, nervous affections, gout and rheumatism these pills have raised themselves a universal fame. They expel all impurities from the blood, and thus restore cheerfulness and vigour.

## THE DIEU-DONNE GOLD COMPANY (LIMITED).

CAPITAL £50,000, IN SHARES OF £1 EACH. Of which 35,000 will be taken by the vendor at the option of the directors in payment of seven-eighths of the purchase-money.

PAYABLE—2s. 6d. on application, 2s. 6d. on allotment, and the balance as may be required.

DIRECTORS.—HENRY DUNCAN, Esq., Chairman South London Tramways Company (Limited), and Director of King Alfred Silver Mining Company (Limited).

A. R. ROBINSON, Esq., Director of North London Suburban Tramways Company (Limited).

W. H. SAUNDERS, Esq., Chairman Norwood (Middlesex) Waterworks Company (Limited).

H. S. WILDE, Esq., Chairman New District London Omnibus Company (Limited).

SOLICITORS—Messrs. FOWLER and CO., 3, Victoria-street, S.W.

BANKERS—THE AGRA BANK (Limited), Nicholas-lane, E.C.

AUDITORS—To be appointed by the shareholders.

SECRETARY—Mr. T. W. MARTIN.

OFFICES.—2, GEORGE STREET, MANSION HOUSE, LONDON, E.C.

### ABRIDGED PROSPECTUS.

This company is established to acquire, upon exceptionally favourable terms, the mining leases, granted by the Dutch Government, at a rental of about 50/- annually, of the Gold-placer Dieu-Donné of about 15,000 acres, situated upon the Upper Saramacca River in the Colony of Surinam (Dutch Guiana), and to work and develop the rich auriferous resources of the property.

The placer Dieu-Donné is situated about 150 miles from Paramaribo (the capital of the colony), and can be reached in 1 to 2 days by steamer. The country is undulating and intersected by streams and creeks, on the banks of which experimental workings (with unskilled labour and the rudest appliances), it is stated, have furnished remarkable results.

In about 23 days six negroes washed out small nuggety gold to the value of about £130 leaving gold-dust in the tailings calculated to well repay a second operation; and in an adjacent placer, where the workings have been extended up to the employment of as many as 100 men, a still better proportionate yield has resulted.

The estimated annual yield of the alluvial workings, as adduced from these and other experiments, supposing 100 men to be employed, would not be less than £30,000; and the total working charges under £6000, leaving, from this source alone, a net annual return of fully £24,000 upon the proposed paid-up capital.

There have been found numerous small pieces of quartz, very rich in gold; these are sharp and unworn, proving them to be fragments of reefs near hand, and probably accessible by tunnelling; and pointing to future crushing operations of an important and most remunerative character.

Differing from gold mines in general, the workings upon this company's property are in the surface sand and gravel; the great expense and delay which attend the equipment and opening of mines under ordinary circumstances will, therefore, be avoided, and an immediate return may be expected. The conversion of gold mining produce, moreover, is unattended with the delays incident to the realisation of other minerals, and the Government export charge on gold is only 5 per cent. in Surinam.

The lenses, including all effects on the ground, have been secured by the company for the sum of £40,000/- of which the vendor is willing to take £35,000 in fully-paid shares if required by the directors, and bear all expenses of forming the company up to the allotment of shares.

The agreements, with the documentary evidence as to the property, and Consular and Government Certificates, maps, and samples, can be inspected at the office of the company, where may be obtained full Prospectuses and Forms of Application for Shares.

### LANIVET, CORNWALL.

DESIRABLE FREEHOLD PROPERTIES, CONSISTING OF MILLS, MEADOWS, DWELLING HOUSES, COMMONS, MANORIAL AND MINERAL RIGHTS on LAMORRICK AND CHURCHTOWN COMMONS and CLAN ESTATE, comprising upwards of 244 Acres.

MESSRS. PHILIP AND CO. are instructed by the Agra Bank (Limited) to SELL BY AUCTION, at the Lanivet Inn, Lanivet, on Tuesday, 19th October, 1880, at Three P.M., the above VALUABLE PROPERTIES, which are situate in the parish of Lanivet, within the Parliamentary Borough of Bodmin, and three miles of the town.

Plans, conditions, and particulars of the Auctioneers, at Bodmin and St. Austell; or of Messrs. ASHFURT, MORRIS, CRISP, and CO., 6, Old Jewry, London, E.C.

TO BE SOLD, BY AUCTION, as a going concern, pursuant to an Order of the H'ly Court of Justice, Chancery Division, made in an action Hayes c. Booth, 18/1, H. No. 30, with the approbation of the Honourable Mr. Baron Pollock (for the Master of the Rolls), by Mr. SAMUEL EDWARDS, the person appointed by the Judge, at the Palatine Hotel, Manchester, in the County of Lancaster, on Thursday, the 14th day of October, 1880, at Four o'clock in the afternoon precisely, in One Lot, the LEASEHOLD COLLIERIES, MINES, and MINERALS of the

AUDLEY COAL AND IRON COMPANY, situated at DIGLAKE and HAYES WOOD, in the parish of AUDLEY, in the County of STAFFORD; together with the ENGINES, MACHINERY, WAGONS, PLANT, FIXTURES, and other conveniences for carrying on business.

And also the FREEHOLD LAND and PREMISES of the said company, situate in the parish of Audley aforesaid and at Newcastle-under-Lyme, in the said county, and the cottages erected by the company on lands adjoining the said collieries.

The leasehold lands cover an area of about 900 acres, and are held under a lease of which about 12½ years are unexpired.

The freehold land at Hayes Wood contains about 2600 square yards. The freehold land at Newcastle-under-Lyme contains about 5385 square yards.

Both collieries are on the Audley Branch of the North Staffordshire Railway. The plant and machinery comprise smelting furnace, blowing engine, with vertical cylinder boilers, and about 200 wagons.

Printed particulars, with plans and conditions of sale, may be obtained gratis in the country from Mr. W. H. DUTON, Solicitor, Newcastle-under-Lyme; Messrs. COOPER, Solicitors, of the same place; Mr. W. K. MOSTON, of 24, Cheap-side, Hanley; Mr. THOMAS SHERRATT, Solicitor, Kidsgrove, and from the Auctioneer, Newcastle-under-Lyme; and in London from Messrs. COOPER, 42, Bedford-row; Messrs. PEACOCK and GODDARD, 3, South-square, Grays' Inn; and Messrs. LEWIS and SONS, 7, Wilmington-square, W.C.

ALFRED RAWLINSON, Chief Clerk.

### WHEAL CUNNING UNITED, ST. JUST.

TUESDAY, OCTOBER 19TH, 1880.

TO BE SOLD, AT AUCTION, at Wheal Cuning United Mine, St. Just, by JOHN THOMAS, on Tuesday, 19th October instant, at Twelve o'clock, the following

VALUABLE MACHINERY AND MATERIALS, viz.:—

ONE 36 in. cylinder PUMPING ENGINE, 8 ft. stroke, with TWO BOILERS.

ONE 37 in. cylinder PUMPING ENGINE, 7 ft. stroke, with ONE BOILER.

ONE 24 in. cylinder PUMPING and WINDING ENGINE, 5 ft. stroke, with ONE BOILER and CAGE.

ONE 28 in. cylinder STAMPING and WINDING ENGINE, 8 ft. stroke, with ONE BOILER and CAGE.

ONE 24 in. cylinder STAMPING ENGINE, 8 ft. stroke, with TWO BOILERS.

ONE 24 in. cylinder WINDING ENGINE, 8 ft. stroke, with CAGE and FLY-WHEEL.

EIGHT STAMP AXLES.

ONE WATER-WHEEL, 52 ft. diameter.

One water wheel, 1 balance bob, 2 dry tubes, 3 winches, 60 pumps (from 4 in. to 8 in. diameter, with 1 in. and door pieces to match), several tons of rail iron, 5s. fins, 1½ in. round iron rods, several skips and tram wagons, powerful lifting screw, smithy tools, miners' tools, drop screw, blocks, screwing tools, flange bolts, staples and glands, wood sheds and flooring, klevens, barrows, s. water wheels, capstan, shears, shaft tackle, whin chain, wire rope, sheaves, wood work of various kinds, galvanised wire, rolls, old wrought and cast iron, &c.

For further particulars, apply to R. BOYNS, Esq., Bosweden House, St. Just; or the Agents on the Mine; or JOHN THOMAS, Auctioneer, Redruth. Sale will commence punctually at 12:30 to the minute.

### UNION SLATE AND SLAB COMPANY (LIMITED).

IN LIQUIDATION.

TO BE SOLD, THE MOELWYN SLATE QUARRY, situated in the parish of Ffestiniog, near the Tan-y-Grissian Station on the Ffestiniog Railway.

The quarry has been opened to a considerable extent, and a large amount of money has been expended in developing the property, and in making inclines to connect with the Ffestiniog Railway. There is a powerful water-wheel, saw and planing tables, drum houses, wagons, and every requisite for effective working. The property consists of 356 acres, together with the necessary sheds, burrows, &c.

Further particulars may be had on application to the Liquidators of the said company, at 9, Victoria Chambers, Westminster.

### VALUABLE INVESTMENT.

### THE WEST DOROTHEA SLATE COMPANY (LIMITED).

IN LIQUIDATION.

TO BE SOLD, THE TYN-Y-WERGLODD SLATE QUARRIES, situated in NANTLLE VALE, near CARMARVON, and being part of the same vein as the celebrated Penrhyn and Velinhell Slates.

The Quarries have been opened to a considerable extent, and before they were closed, in consequence of the late depression in the slate trade, they were turning out sufficient slates to pay a very handsome percentage on the paid-up capital of the company.

Upwards of £25,000 has been spent in developing this property, and it is well provided with all the necessary gear and steam-power for effective working. The rights extend to over 52 acres.

There is an unlimited tip room, and the ground extends to within 300 yards of the London and North-Western Railway Station at Nantlle.

The company is now in voluntary liquidation, and the almost nominal sum of £6000 will be taken for its interest in the property, which is little more than the value of the plant, machinery and buildings now on the premises.

Further particulars can be had on application to the Liquidator,—

W. W. TOMLINS, 4, St. Ann's-square, Manchester.

### LLANIDLOES, MONTGOMERYSHIRE.

IN LIQUIDATION.

TO BE SOLD, BY PRIVATE TREATY, the WHOLE of the PROPERTY known as the

### CWM RICKET AND MAESNANT LEAD MINE.

Which is situate in the parish of LLANGURIG, and is about seven miles west of LLANIDLOES. The set is very extensive and the strata highly mineralised, and contains 17 lodes, including the well-known Van Lode. Two shafts have been sunk and levels driven on these lodes, out of which some tons of rich lead ore have been obtained.

The Plant consists of WATER-WHEELS, DRAWING MACHINE, CRUSHER, PUMPS, and ORE DRESSING TOOLS, all of which are in good working condition. There are also smithy, offices, dwelling houses, dressing floors, &c.

To view, apply to Capt. GREENFELD, on the Mine; and to treat, apply to Mr. R. B. STOCKWELL, Liquidator, 15, Dickinson-street, Manchester.

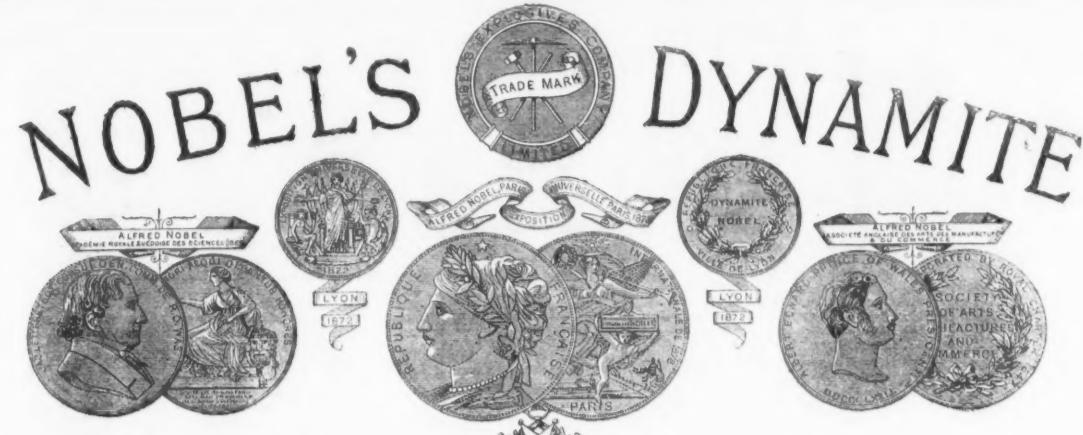
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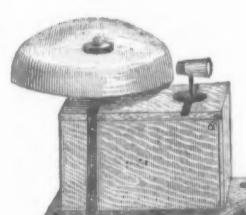
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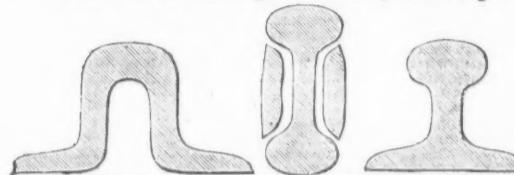
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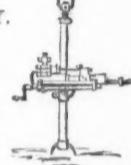
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home prices. As to care taken in reporting, reference is made to the *Mining Journal*  
Supplement, April 1, 1876, containing a report on property of the Maxwell Land  
Grant and Railway Company; as to technical standing, to the prominent men of  
the trade—compare *Mining Journal* of Aug. 30 and Nov. 31, 1872, and *New York*  
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Shares.	Paid.	Last wk.	Clos. pr.	Total divs.	Per sh.	Last pd.
3939 Blue Hills, t, c, St. Agnes	4 6	6	4	3 1/2	4	... 0 2 0
10000 Caron, t, Cardigan*	2 0	0	2	1 1/2	2	... 0 2 0
10000 Carn Brea, c, t, Illogan†	56 7	6	85	80 82 1/2	308	0 0 1 0
10240 Devon Gt. Consols, c, a, Tavistock†	1 0	0	11 1/2	11 1/2	118	1 0 0 8
4296 Dolcoath, c, t, Camborne	10 14	10	56	54 56	118	11 3 0 0
3000 East Craven Moor, t, Pateley Brig.	10 0	0	9	8 9	0 5 0	0 5 0 0
6400 East Pool, t, c, Illogan	0 9	9	39	37	38	20 17 9 1 2 6
12500 Fronzoch, t, Cardigan (11000 sh. iss.)	2 0	0	3 1/2	2 1/2	3 1/2	0 2 0 0
40000 Glasc. Car., c* (30000 sh. £1 pd.)	10000 15s	pd. 1/2	1 1/2	0 13 10	0 0 6	0 0 0 0
45000 Gorsedd and Merlin Con., t, Flint	2 10	0	3	2 1/2	3	0 5 0 0
15000 Great Laxey, t, Isle of Man†	4 0	0	19	18 19	25 2	0 0 8 0
64000 Green Hurlth, t, Durham*	0 6	0	8	8 1/2	8 1/2	0 5 0 0
20000 Grogwinion, t, Cardigan*	2 0	0	3/4	3 3/4	0 16 4	0 1 6 0
28000 Isle of Man, t, Isle of Man*	25 0	0	—	—	83 5 0	1 0 0 0
20000 Leadhills, t, Lanarkshire	6 0	0	3/4	2 1/2	3 1/2	0 15 0 0
4000 Leadhills, t, Cardiganshire	18 15	0	—	—	604 10 0	0 2 0 0
5000 Melinor, c, Hayle*	2 6	0	5	4 1/2	5	1 1/2 0 0 2 6
6000 Minera Mining Co., t, Wrexham*	5 0	0	11	28 17 2	0 4 0	0 0 0 0
20000 Mining Co. of Ireland, c, t, b*	7 0	0	3	3 1/2	3	24 0 0 0 2
8000 Monks, c, Anglesea	5 0	0	15/2	15 1/2	10 0	0 10 0 0
5328 North Busy, t, c, Blackwater	0 5	0	3/4	3 3/4	0 3 4	0 0 10 0
11829 North Hendre, t, Wales	2 10	0	5/2	5 5/2	3 10 0	0 0 7 0
4000 Rhydalan, t, Wales	10 0	0	—	—	0 5 0 0	0 3 0 0
512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
4000 Rhylalan, t, Wales	10 0	0	—	—	0 5 0 0	0 5 0 0
512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
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512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
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512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
4000 Rhylalan, t, Wales	10 0	0	—	—	0 5 0 0	0 5 0 0
512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
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512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
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512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
4000 Rhylalan, t, Wales	10 0	0	—	—	0 5 0 0	0 5 0 0
512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
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512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
9000 South Darren, t, Cardigan*	1 16	0	2 1/2	2 1/2	0 4 0	0 2 0 0
4500 South Wheal Frances, t, Illogan†	7 12	4	12 1/2	12 1/2	40 15 6	0 0 10 0
12000 Tankerville, t, Salop†	6 0	0	2/4	2 1/2	4 17 6	0 5 0 0
12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
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512 South Cardigan, c, St. Cleer†	1 5	0	65	50 60	749 0	0 1 0 0
6123 South Conduor, t, c, Camborne†	6 5	6	11 1/2	11 1/2	7 12 0	0 0 10 0
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12000 Roman Gravels, t, Salop*	7 10	0	10	9 1/2 9 1/2	8 1 0	0 0 5 0
4000 Rhylalan, t, Wales	10 0	0</				

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